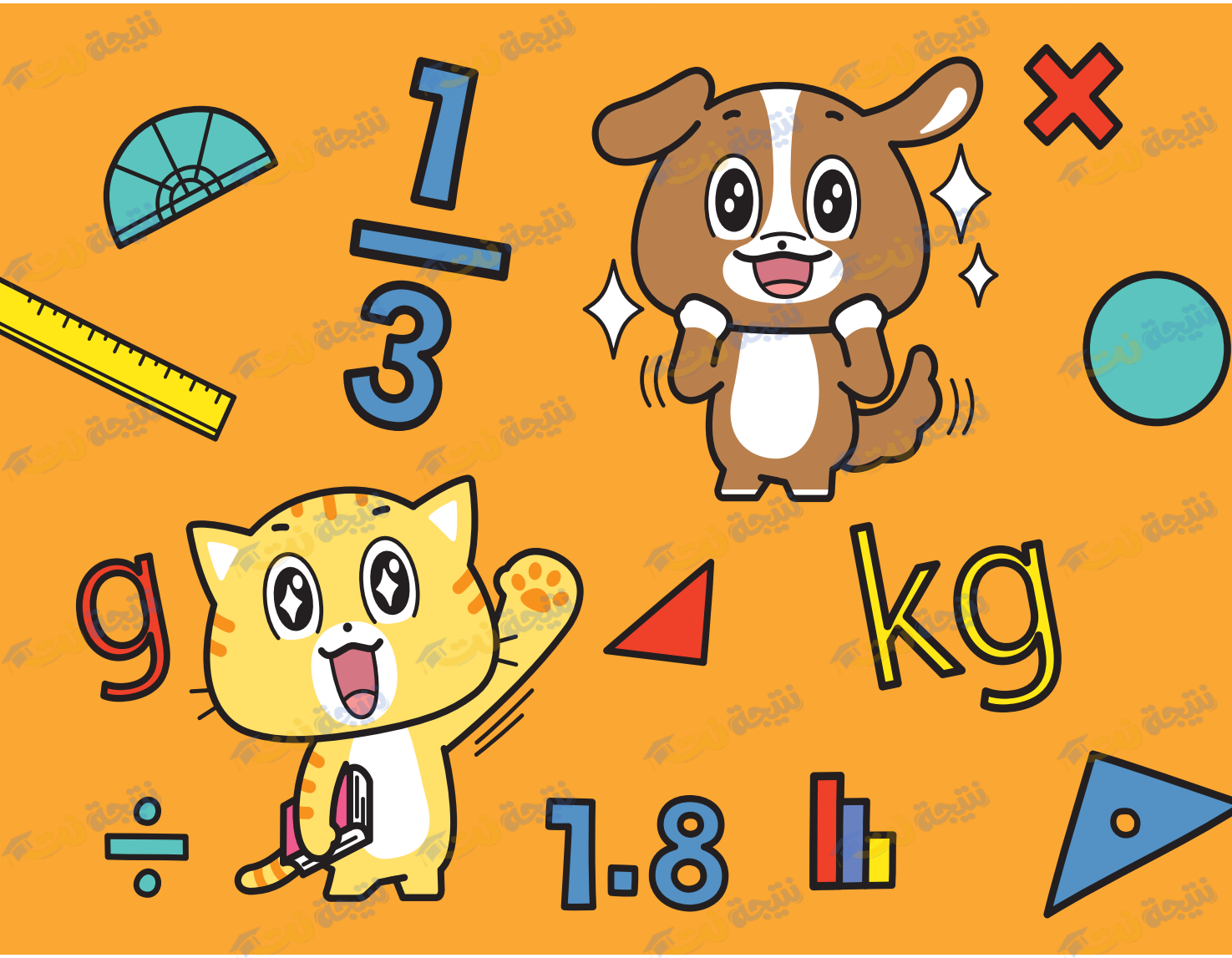
PRIMARY 3 Term 1

MATHEMATICS



SPRIX

CACD

nezakr.nategа4dk.net

Editorial Team

Project Lead & Editorial Director

Maki Komizo

Editors & Writers

Miho Iga

Takayuki Kobayashi

Tomoaki Tsunoyama

Designers

Sayaka Higuchi

Shigeyuki Hatakeyama

The Central Administration for Curriculum Development

Mrs. Manal Abbas Ahmed Azkol

Dr. Mohammed Mohey El-Din Abdel Salam

Mrs. Eman Sayed Ramadan Mohammed

Mr.Samir Mohamed Sedawy

Mr. Sameh Abd Elbasset Elsayed Mohamed

Mrs.Sabah Abdelwahed

General Supervision

Dr. Gebriel Anwer Hemieda

Head of the Central Administration for Curriculum Development

All Rights Reserved ©Ministry of Education and Technical Education - 2026 / 2027

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means-electronic, photocopying, recording, or otherwise-without prior written permission of the Ministry of Education and Technical Education.

nezakr.natega4dk.net

Introduction

In light of Egypt's Vision 2030 and the state's ongoing efforts to develop education, the Ministry of Education and Technical Education places great emphasis on updating school curriculums — particularly in mathematics—due to its vital role in fostering critical thinking skills, problem-solving abilities, and a focus on building a deep understanding of fundamental concepts, moving away from rote memorization, especially in the early stages. The content is organized in a gradual and systematic manner that enables students to progress smoothly from simple to complex concepts, linking mathematical concepts to real-life situations, and relying on interactive methods that include teamwork and discussion, making learning more enjoyable.

In this context, the Ministry has been keen to benefit from successful international experiences. This has led to collaboration between the Egyptian and Japanese sides in developing mathematics curriculums, given Japan's global excellence in this field, as evidenced by its notable achievements in international competitions, which reflect the strength of its curriculums and teaching methods.

From this concern, this book is the result of the contribution between the Ministry of Education and Technical Education and the Japanese side.

This book represents a first step within a comprehensive plan to develop mathematics curriculums across all grade levels, with the aim of building an integrated educational system that combines the best international practices with Egypt's authentic identity.

The Ministry of Education and Technical Education firmly believes that developing education is a true investment in the nation's future, and that updating curriculums is not an end in itself, but rather a means to build an aware, creative generation, capable of keeping pace with scientific and technological changes in today's world.

nezakr.natega4dk.net

nezakr.natega4dk.net

Let's Learn Together!

Characters:



Brainy



Smarty



Genius

nezakr.natega4dk.net

TERM 1

Primary 3 Mathematics

Contents

- Chapter 1 Rules of Multiplication — 4
- Chapter 2 Time and Duration — 16
- Chapter 3 Division — 28
- Chapter 4 Addition and Subtraction — 40
- Chapter 5 Length — 50
- Chapter 6 Organizing Data — 58
- Chapter 7 Mental Math — 72
- Chapter 8 Division with Remainders — 78
- Chapter 9 Numbers Bigger than 10,000 — 88
- Chapter 10 Vertical Multiplication (Part 1) — 102

nezakr.natega4dk.net

nezakr.natega4dk.net

1-1 Properties of Multiplication (Part1)

Point!

When you add **1** to the Multiplier, the answer gets bigger by the **Multiplicand**. When you take away 1 from the Multiplier, the answer gets smaller by the **Multiplicand**.

Example

$7 \times 2 = 14$ → ↓goes up by 1 → $7 \times 3 = 21$ (↓goes up by 7)

$7 \times 4 = 28$ → ↓goes down by 1 → $7 \times 3 = 21$ (↓goes down by 7)

You can switch the order of the numbers, and the answer will be **the same**.

Example

$7 \times 3 = 7+7+7$ $\quad 7 \times 3 = 21 \longrightarrow 3 \times 7 = 21$



Warm Up

Write the missing number in ☐

(1) 5×8 is ☐ more than 5×7.

(2) $4 \times 5 = 4 \times 6 -$ ☐

(3) $6 \times 3 =$ ☐ $\times 6$

(4) $9 \times 5 = 5 \times$ ☐

How to Solve

(1) When you add 1 to the Multiplier, the answer gets bigger by the Multiplicand.

5×8 is 5 more than 5×7. — The first number is 5.

(2) $4 \times 5 = 4 \times 6 - 4$ — When you take away 1 from the Multiplier, the answer gets smaller by the Multiplicand.

(3) $6 \times 3 = 3 \times 6$ — You can switch the order of the numbers, and the answer will be the same.

(4) $9 \times 5 = 5 \times 9$

nezakr.natega4dk.net

Try

Write the missing number in ☐

(1) 2 × 5 is ☐ more than 2 × 4.

(2) 5 × 3 is ☐ less than 5 × 4.

(3) 6 × 9 = 6 × 8 + ☐

(4) 9 × 7 = 9 × 8 − ☐

(5) 4 × 8 = ☐ × 4

(6) 3 × 9 = 9 × ☐

Exercise

Write the missing number in ☐

(1) 1 × 4 is ☐ more than 1 × 3.

(2) 5 × 5 is ☐ more than 5 × 4.

(3) 3 × 3 is ☐ less than 3 × 4.

(4) 4 × 7 is ☐ less than 4 × 8.

(5) 7 × 2 = 7 × 1 + ☐

(6) 9 × 8 = 9 × 7 + ☐

(7) 9 × 5 = 9 × 6 − ☐

(8) 8 × 8 = 8 × 9 − ☐

(9) 1 × 8 = ☐ × 1

(10) 4 × 9 = 9 × ☐

(11) 3 × 6 = ☐ × 3

(12) 7 × 2 = 2 × ☐



nezakr.natega4dk.net

1-2 Properties of Multiplication (Part2)

Point!

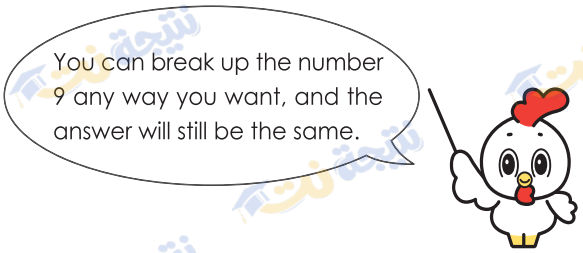
You can break up the Multiplicand to multiply, and the answer will be **the same**.

$9 \times 3 = 27$

$4 \times 3 = 12$

$5 \times 3 \quad 15$

A total of 27



You can break up the Multiplier to multiply, and the answer will be **the same**.

$9 \times 3 = 27$

$9 \times 1 = 9$

$9 \times 2 = 18$

A total of 27

Warm Up

Write the missing number in $\square$

(1) 8×4

$5 \times 4 = \square$

$\square \times 4 = \square$

A total of $\square$

(2) 6×7

$6 \times \quad 5 = \square$

$6 \times \square = \square$

A total of $\square$

How to Solve

(1) 8×4

$5 \times 4 = 20$

$3 \times 4 = 12$

A total of 32

(2) 6×7

$6 \times \quad 5 = 30$

$6 \times 2 = 12$

A total of 42

nezakr.natega4dk.net

Try

Write the missing number in □

(1) 7 × 9
- 4 × 9 = □
- □ × 9 = □

A total of □

(2) 8 × 5
- □ × 5 = □
- 2 × 5 = □

A total of □

(3) 9 × 5
- 9 × 3 = □
- 9 × □ = □

A total of □

(4) 6 × 8
- 6 × □ = □
- 6 × 3 = □

A total of □

Exercise

Write the missing number in □

(1) 9 × 8
- 4 × 8 = □
- □ × 8 = □

A total of □

(2) 8 × 7
- □ × 7 = □
- 2 × 7 = □

A total of □

(3) 6 × 6
- 6 × 1 = □
- 6 × □ = □

A total of □

(4) 7 × 7
- 7 × □ = □
- 7 × 2 = □

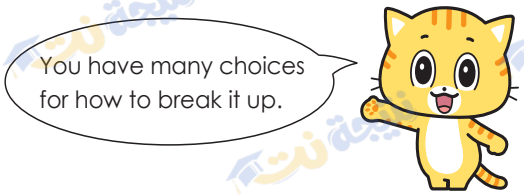
A total of □

(5) 8 × 8
- 8 × 2 = □
- 8 × □ = □

A total of □

(6) 6 × 9
- 6 × □ = □
- 6 × 4 = □

A total of □



nezakr.natega4dk.net

1-3 Multiplying by 10 and 0 (Part1)

Point!

Multiplying by 10

		Multiplier									
		1	2	3	4	5	6	7	8	9	10
Multiplicand	10	10	20	30	40	50	60	70	80	90	100

Any number multiplied by 0 is 0.

Example $4 \times 0 = 0$ $0 \times 14 = 0$

Warm Up

(1) Let's do the multiplication.

① 10×7 ② 5×10 ③ 0×3

(2) 8 people get 10 candies each. How many candies are needed in total?

Write a mathematical sentence and the answer.

How to Solve

(1) ① $10 \times 7 = 70$

② $5 \times 10 = 10 \times 5$

$= 50$

You can switch the order of the numbers, and the answer will be the same.

③ $0 \times 3 = 0$

Any number multiplied by 0 is 0.

(2) A mathematical sentence: $10 \times 8 = 80$

Answer: 80 candies

Don't forget to include the unit in your final answer!



nezakr.natega4dk.net

Try

(1) Let's do the multiplication.

① 10 × 3　② 7 × 10　③ 10 × 10

④ 9 × 0　⑤ 0 × 8　⑥ 15 × 0

(2) One box has 10 pencils. If you buy 4 boxes, how many pencils will you have in total? Write a mathematical sentence and the answer.

Exercise

(1) Let's do the multiplication.

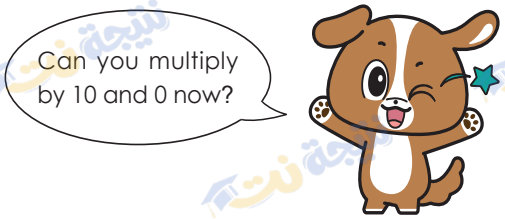
① 10 × 6　② 4 × 10　③ 10 × 10

④ 10 × 9　⑤ 3 × 10　⑥ 8 × 10

⑦ 5 × 0　⑧ 0 × 1　⑨ 12 × 0

(2) A bus can hold 10 people. If there are 3 buses, how many people can ride in total? Write a mathematical sentence and the answer.

(3) There are 10 children. To give 8 apples to each child, how many apples are needed in total? Write a mathematical sentence and the answer.



nezakr.natega4dk.net

1-4 Multiplying by 10 and 0 (Part 2)

Warm Up

The table below shows Hassan's scores from the game.

Score (Points)	3	2	1	0	Total
Count (Balls)	0	1	3	6	10
Total Score (Points)					

(1) What is the total score for the 1-point throws?

(2) What is the total score for the 0-point throws?

(3) What is Hassan's total score?

How to Solve

Score is calculated by (Points) × (Count).

(1) A mathematical sentence: $1 \times 3 = 3$

Answer: 3 Points

Score (Points)	3	2	1	0	Total
Count (Balls)	0	1	3	6	10
Total Score (Points)					

(2) A mathematical sentence: $0 \times 6 = 0$

Answer: 0 Points

Score (Points)	3	2	1	0	Total
Count (Balls)	0	1	3	6	10
Total Score (Points)					

(3) Find the scores for the other areas, and then calculate the total.

Score (Points)	3	2	1	0	Total
Count (Balls)	0	1	3	6	10
Total Score (Points)	0	2	3	0	5

3-point area:

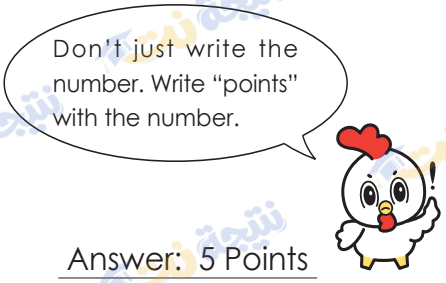
$3 \times 0 = 0$

2-point area:

$2 \times 1 = 2$

A mathematical sentence: $0 + 2 + 3 + 0 = 5$

Answer: 5 Points



nezakr.natega4dk.net

Try

The table below shows Sara's scores from the game.

Score (Points)	10	5	3	0	Total
Count (Balls)	3	1	4	2	10
Total Score (Points)					

(1) What is the total score for the 10-point throws?

(2) What is the total score for the 3-point throws?

(3) What is the total score for the 0-point throws?

(4) What is Sara's total score?

Exercise

(1) The table below shows Dina's scores from the game.

Score (Points)	3	2	1	0	Total
Count (Balls)	3	0	5	2	10
Total Score (Points)					

① What is the total score for the 2-point throws?

② What is the total score for the 1-point throws?

③ What is the total score for the 0-point throws?

④ What is Dina's total score?

(2) The table below shows Gamal's scores from the game.

Score (Points)	10	5	3	0	Total
Count (Balls)	2	0	7	1	10
Total Score (Points)					

① What is the total score for the 10-point throws?

② What is the total score for the 5-point throws?

③ What is the total score for the 0-point throws?

④ What is Gamal's total score?

nezakr.natega4dk.net

1-5 Find the Missing Numbers

Point!

If you don't know the Multiplier, think about the times table for the first number.

Example 4 × 6 = 24

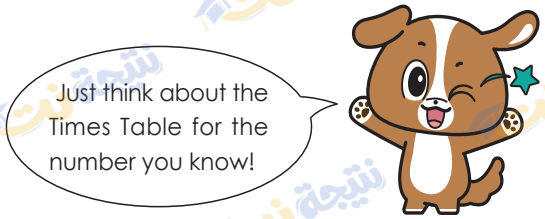
→ Let's think about the 4 Times Table.

If you don't know the Multiplicand, you can use the multiplication rules.

Example 6 × 4 = 24 ····· Switch the order of the numbers.

4 × 6 = 24

→ Let's think about the 4 Times Table.



Warm Up

Write the missing number in the box.

(1) 8 × ☐ = 40

(2) ☐ × 4 = 16

How to Solve

(1) 8 × ☐ = 40

Look for a product of 40 in the 8 Times Table.

8 × 1 = 8 8 × 2 = 16 8 × 3 = 24 8 × 4 = 32 8 × 5 = 40

So,

8 × 5 = 40

nezakr.natega4dk.net

(2) $\square \times 4 = 16$

$4 \times \square = 16$ ● Switch the order of the numbers in multiplication.

Look for a product of 16 in the 4 Times Table.

$4 \times 1 = 4$ $4 \times 2 = 8$ $4 \times 3 = 12$ $4 \times 4 = 16$

So,

$4 \times 4 = 16$

Try

Write the missing number in the box.

(1) $3 \times \square = 12$

(2) $6 \times \square = 36$

(3) $\square \times 9 = 45$

(4) $\square \times 7 = 42$

(5) $10 \times \square = 50$

(6) $2 \times \square = 0$

Exercise

Write the missing number in the box.

(1) $2 \times \square = 14$

(2) $3 \times \square = 27$

(3) $5 \times \square = 25$

(4) $9 \times \square = 36$

(5) $\square \times 4 = 32$

(6) $\square \times 6 = 24$

(7) $\square \times 7 = 35$

(8) $\square \times 8 = 48$

(9) $10 \times \square = 70$

(10) $\square \times 10 = 40$

(11) $3 \times \square = 0$

(12) $\square \times 9 = 0$



nezakr.natega4dk.net

Try

1-1 **1** Write the missing number in the box.

(1) 3 × ☐ more than 3 × 4.

(2) 6 × ☐ less than 6 × 4.

(3) 6 × 7 = 6 × 6 + ☐

(4) 8 × 7 = 8 × 8 − ☐

1-2 **2** Write the missing number in the box.

(1) 7 × 9
- 3 × 9 = ☐
- ☐ × 9 = ☐

A total of ☐

(2) 7 × 5
- ☐ × 5 = ☐
- 3 × 5 = ☐

A total of ☐

1-3 **3** Let's do the multiplication.

(1) 10 × 4 (2) 0 × 14 (3) 10 × 10

1-4 **4** The table below shows Sara's scores from the game.

Score (Points)	10	6	1	0	Total
Count (Balls)	3	2	4	1	10
Total Score (Points)					

(1) What is the total score for the 10-point throws?

(2) What is the total score for the 6-point throws?

(3) What is the total score for the 0-point throws?

(4) What is Sara's total score?

1-5 **5** Write the missing number in the box.

(1) 5 × ☐ = 20 (2) 6 × ☐ = 0

(3) ☐ × 9 = 72 (4) ☐ × 7 = 49

nezakr.natega4dk.net

Exercise

1-1 **1** Write the missing number in the box.

(1) 2 × ☐ more than 2 × 6.

(2) 5 × ☐ less than 5 × 7.

(3) 7 × 9 = 7 × 8 + ☐

(4) 9 × 6 = 9 × 7 − ☐

1-2 **2** Write the missing number in the box.

(1) 5 × 9 <
- 4 × 9 = ☐
- ☐ × 9 = ☐

A total of ☐

(2) 8 × 7 <
- ☐ × 7 = ☐
- 5 × 7 = ☐

A total of ☐

1-3 **3** Let's do the multiplication.

(1) 6 × 10 (2) 8 × 0 (3) 13 × 0

1-4 **4** The table below shows Gamal's scores from the game.

Score (Points)	10	5	3	0	Total
Count (Balls)	4	5	0	1	10
Total Score (Points)					

(1) What is the total score for the 10-point throws?

(2) What is the total score for the 3-point throws?

(3) What is the total score for the 0-point throws?

(4) What is Gamal's total score?

1-5 **5** Write the missing number in the box.

(1) 3 × ☐ = 24 (2) 7 × ☐ = 28

(3) ☐ × 8 = 64 (4) ☐ × 4 = 0

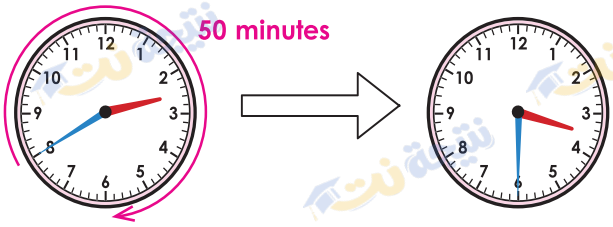
nezakr.natega4dk.net

2-1 Finding Time Before and After (Part 1)

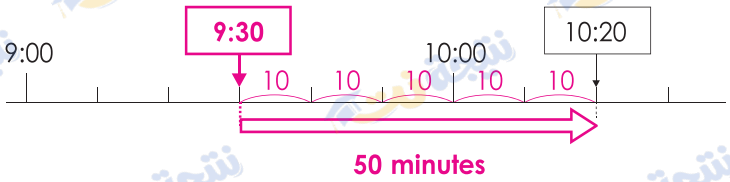
Point!

When you find the time for "minutes before" or "minutes after," use a clock face or a number line to help you think.

Example 1 The time 50 minutes after 2:40 is **3:30** using the clock.



Example 2 The time 50 minutes before 10:20 is **9:30** using the number line.



Warm Up

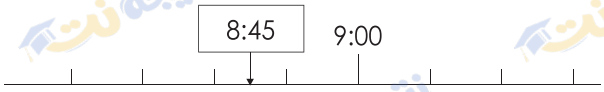
(1) What time was it 30 minutes before 6:20?

Think using the diagram on the right.



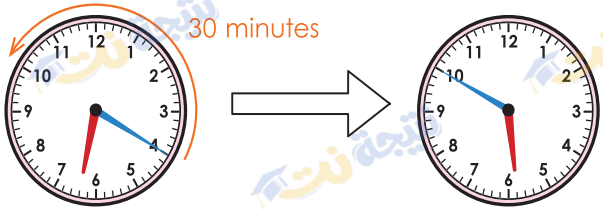
(2) What time will it be 25 minutes after 8:45?

Think using the diagram below.



How to Solve

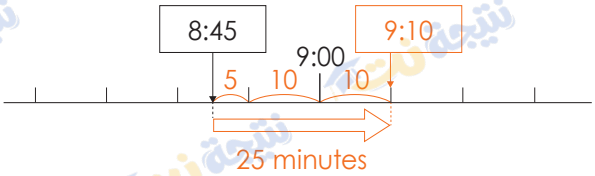
(1)



Answer: 5:50

nezakr.natega4dk.net

(2)



Answer: 9:10

Try

(1) What time will it be 55 minutes after 3:10?



(2) What time was it 45 minutes before 8:15?



(3) You left home, walked for 30 minutes, and arrived at the aquarium at 9:20. What time did you leave home?

Exercise

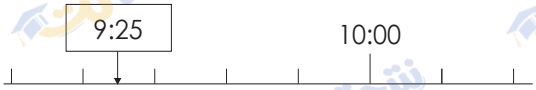
(1) What time will it be 30 minutes after 1:40?



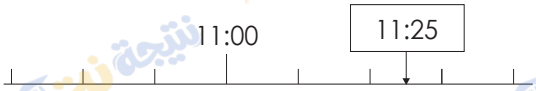
(2) What time was it 20 minutes before 3:15?



(3) What time will it be 45 minutes after 9:25?



(4) What time was it 55 minutes before 11:25?



(5) You left home, walked for 40 minutes, and arrived at the flower shop at 5:20. What time did you leave home?

nezakr.natega4dk.net

2-2 Finding Time Before and After (Part2)

Point!

1 hour = 60 minutes

To find the time between two moments, first find the time to the next hour.

Example **The time from 2:40 to 3:50**

The next hour is 3:00. Let's split the time into "until 3:00" and "after 3:00."



→ It is 20 minutes until 3:00, and then 50 minutes more.

The total is 70 minutes.

70 minutes = 60 minutes + 10 minutes

The time is 1 hour 10 minutes.

Warm Up

(1) Find the elapsed time.

① The time from 3:50 PM to 4:15 PM

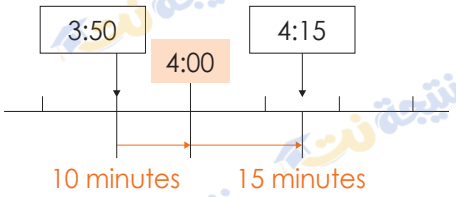
② The time from 7:20 AM to 8:35 AM

(2) You rode the bus for 50 minutes and the train for 30 minutes. How many hours and minutes did you spend riding vehicles in total?

nezakr.natega4dk.net

How to Solve

(1) ① The next hour is 4:00. Let's split the time into "until 4:00" and "after 4:00."



→ It is 10 minutes until 4:00, and then 15 minutes more.

The total is 25 minutes .

② The next hour is 8:00. Let's split the time into "until 8:00" and "after 8:00."



→ It is 40 minutes until 8:00, and then 35 minutes more.

The total is 75 minutes.

75 minutes = 60 minutes + 15 minutes

The time is 1 hour 15 minutes .

(2) 50 minutes plus 30 minutes is 80 minutes in total.

80 minutes = 60 minutes + 20 minutes

The total time is 1 hour 20 minutes .

nezakr.natega4dk.net

Try

(1) Write the missing number in the box.

① 1 hour 20 minutes = ☐ minutes

② 105 minutes = ☐ hours ☐ minutes

(2) Find the elapsed time.

① The time from 4:50 PM to 5:20 PM

② The time from 8:40 AM to 9:45 AM

(3) You rode the bus for 50 minutes and the train for 35 minutes. How many hours and minutes did you spend riding in total?

nezakr.natega4dk.net

Exercise

(1) Write the missing number in the box.

① 1 hour 45 minutes = ☐ minutes

② 70 minutes = ☐ hours ☐ minutes

(2) Find the elapsed time.

① The time from 8:30 PM to 9:10 PM

② The time from 7:50 AM to 8:25 AM

③ The time from 10:50 AM to 11:55 AM

④ The time from 1:10 PM to 2:20 PM

(3) Saly studied from 7:30 PM to 8:15 PM. How many minutes did she study?

(4) Gamel read a book for 45 minutes in the morning and 20 minutes in the afternoon. How many hours and minutes did he read in total?

nezakr.natega4dk.net

2-3 Shorter Time Units

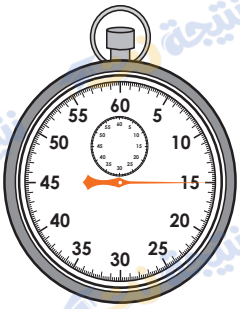
Point!

A **second** is a unit of time shorter than a minute.

1 minute = **60** seconds

A stopwatch is useful for measuring short amounts of time.

Example 1



→ When the hand goes around once, it is 60 seconds. Read the number where the hand is pointing.

15 seconds

Example 2



→ On the large numbers shown, the two digits on the right show the seconds.

45 seconds

Warm Up

(1) Write the missing number in the box.

① 1 minute 5 seconds = ☐ seconds

② 90 seconds = ☐ minutes ☐ seconds

(2) Write the missing unit of time in the box.

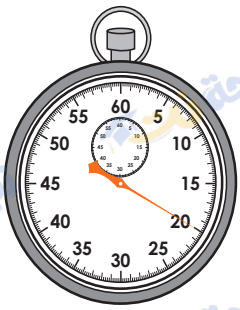
① The time it took to run 50 m → 11 ☐

② The time from waking up until going to sleep → 15 ☐

③ The time spent studying math at school → 45 ☐

nezakr.natega4dk.net

(3) How many seconds does the stopwatch below show?



How to Solve

(1) ① Because 1 minute = 60 seconds,

1 minute 5 seconds = 60 seconds + 5 seconds

= 65 seconds.

② 90 seconds = 60 seconds + 30 seconds

= 1 minutes 30 seconds

(2) ① The time it took to run 50 m ⟶ 11 seconds

② The time from waking up until going to sleep ⟶ 15 hours

③ The time spent studying math at school ⟶ 45 minutes

(3) 20 seconds

nezakr.natega4dk.net

Try

(1) Write the missing number in the box.

① 1 minute = ☐ seconds

② 105 seconds = ☐ minute ☐ seconds

③ 1 minute 40 seconds = ☐ seconds

(2) Write the missing unit of time in the box.

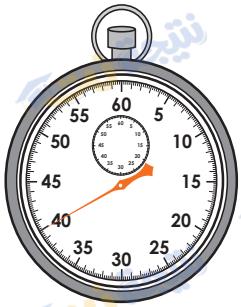
① The time it took to swim 25 m ⟶ 50 ☐

② The time spent at school ⟶ 7 ☐

③ The time spent eating dinner ⟶ 20 ☐

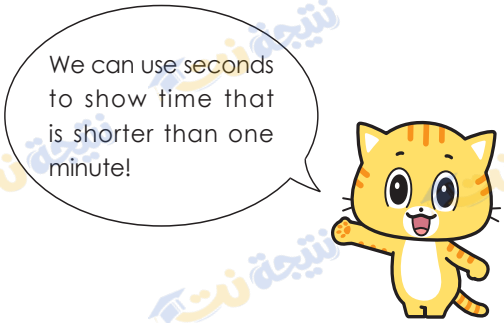
(3) How many seconds does the stopwatch below show?

①



②





nezakr.natega4dk.net

Exercise

(1) Write the missing number in the box.

① 85 seconds = ☐ minutes ☐ seconds

② 110 seconds = ☐ minutes ☐ seconds

③ 1 minutes 30 seconds = ☐ seconds

④ 1 minutes 25 seconds = ☐ seconds

(2) Write the missing unit of time in the box.

① The time it took to run 100 m ⟶ 18 ☐

② The time spent sleeping in a day ⟶ 9 ☐

③ The time spent on a field trip ⟶ 5 ☐

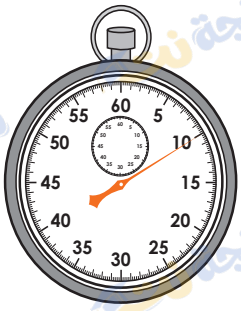
④ The time you can stay underwater ⟶ 30 ☐

⑤ The time spent brushing teeth ⟶ 3 ☐

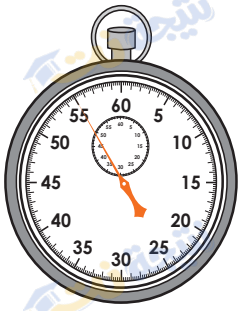
⑥ The time spent cleaning the classroom ⟶ 15 ☐

(3) How many seconds does the stopwatch below show?

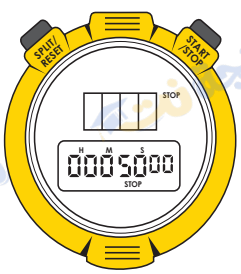
①



②



③



④



nezakr.natega4dk.net

Try

2-1 **1** (1) What time was it 20 minutes before 4:05?

Think using the diagram on the right.



(2) What time will it be 45 minutes after 4:25?

Think using the diagram below.



2-2 **2** (1) Write the missing number in the box.

① 1 hour 35 minutes = ☐ minutes

② 85 minutes = ☐ hour(s) ☐ minutes

(2) You rode the bus for 40 minutes and the train for 50 minutes. How many hours and minutes did you spend riding in total?

2-3 **3** (1) Write the missing number in the box.

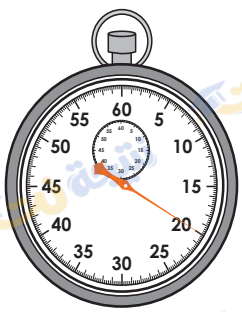
① 1 minute = ☐ seconds

② 115 seconds = ☐ minute(s) ☐ seconds

③ 1 minute 50 seconds = ☐ seconds

(2) How many seconds does the stopwatch below show?

①



②



nezakr.natega4dk.net

Exercise

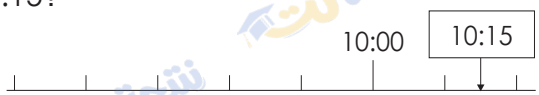
2-1 **1** (1) What time was it 30 minutes before 3:15?

Think using the diagram on the right.



(2) What time was it 45 minutes before 10:15?

Think using the diagram below.



2-2 **2** (1) Write the missing number in the box.

① 1 hour 15 minutes = ☐ minutes

② 115 minutes = ☐ hour(s) ☐ minutes

(2) You rode the bus for 55 minutes and the train for 25 minutes. How many hours and minutes did you spend riding in total?

2-3 **3** (1) Write the missing number in the box.

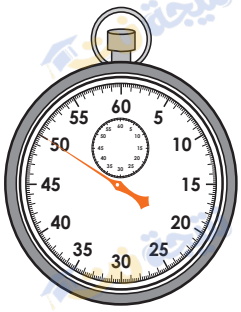
① 1 minute 15 seconds = ☐ seconds

② 95 seconds = ☐ minute(s) ☐ seconds

③ 1 minute 25 seconds = ☐ seconds

(2) How many seconds does the stopwatch below show?

①



②



nezakr.natega4dk.net

3-1 Division

Point!

When you share 12 cookies equally among 3 people, each person gets 4 cookies.

We write this as a mathematical sentence:

12 ÷ 3 = 4, and we read it as

" 12 divided by 3 equals 4 ."

This type of calculation is called **Division** .



In a mathematical sentence 12 ÷ 3 :

The 12 is called the **Dividend** .

The 3 is called the **Divisor** .

The 4 is called the **Quotient**.

You can find the Division answer in the **Divisor's Times Table** .

Example 12 ÷ 3 = 4

Think using the 3 Times Table.
3 × 1 = 3, 3 × 2 = 6, 3 × 3 = 9, 3 × 4 = 12

When the Dividend is 0, the answer is always **0** .

Warm Up

Let's do the division.

(1) 10 ÷ 2 (2) 4 ÷ 4 (3) 3 ÷ 1 (4) 0 ÷ 2

How to Solve

(1) 10 ÷ 2 = 5

Think using the 2 Times Table.
2 × 1 = 2, 2 × 2 = 4, 2 × 3 = 6, 2 × 4 = 8, 2 × 5 = 10

(2) 4 ÷ 4 = 1

Think using the 4 Times Table.
4 × 1 = 4

(3) 3 ÷ 1 = 3

Think using the 1 Times Table.
1 × 1 = 1, 1 × 2 = 2, 1 × 3 = 3

(4) 0 ÷ 2 = 0

When the dividend is 0, the answer is always 0.

nezakr.natega4dk.net

Try

Let's do the division.

(1) 15 ÷ 5

(2) 18 ÷ 3

(3) 36 ÷ 4

(4) 28 ÷ 7

(5) 48 ÷ 6

(6) 14 ÷ 2

(7) 24 ÷ 8

(8) 54 ÷ 9

(9) 8 ÷ 8

(10) 5 ÷ 1

(11) 0 ÷ 3

(12) 0 ÷ 6



Exercise

Let's do the division.

(1) 8 ÷ 2

(2) 32 ÷ 4

(3) 10 ÷ 5

(4) 14 ÷ 7

(5) 49 ÷ 7

(6) 63 ÷ 9

(7) 3 ÷ 3

(8) 16 ÷ 4

(9) 2 ÷ 2

(10) 7 ÷ 1

(11) 0 ÷ 4

(12) 0 ÷ 5

nezakr.natega4dk.net

3-2 Sharing and Division

Point!

- Use division to find out how many are in one group when you share equally.

  Share Of Each Person = **Total Number** ÷ **Number of people**

- Use division to find out how many people can share equally.

  Number of people = **Total Number** ÷ **Share Of Each Person**

- In word problems, the final answer must include a **unit**.

Example

"How many oranges will each person get?" → Answer: ☐ **oranges**

"How many people can share?" → Answer: ☐ **people**

"How long is each piece in **cm**?" → Answer : ☐ **cm**

Warm Up

(1) If you share 24 cookies equally among 3 people, how many cookies will each person get? Write a mathematical sentence and the answer.

(2) If you give 2 pencils to each person from a total of 14, how many people can share? Write a mathematical sentence and the answer.

(3) If you cut a 63 cm ribbon into 7 equal pieces, how long is each piece in **cm**? Write a mathematical sentence and the answer.

How to Solve

(1) a mathematical sentence: 24 ÷ 3 = 8 — Share Of Each Person = Total Number ÷ Number of people

Answer: 8 cookies — the final answer must include a unit

(2) a mathematical sentence: 14 ÷ 2 = 7 — Number of people = Total Number ÷ Share Of Each Person

Answer: 7 people

nezakr.natega4dk.net

(3) a mathematical sentence: $63 \div 7 = 9$

Answer: 9 cm

Think of this problem the same way as sharing among 7 people.

Try

(1) If you share 12 strawberries equally among 3 people, how many strawberries will each person get? Write a mathematical sentence and the answer.

(2) There are 24 candies. If you give 4 candies to each person, how many people can share? Write a mathematical sentence and the answer.

(3) If you cut a 45 cm tape into 5 pieces of equal length, how long is each piece in **cm**? Write a mathematical sentence and the answer.

(4) You make bouquets with 72 flowers by putting 9 flowers in each one. How many bouquets can you make? Write a mathematical sentence and the answer.

Exercise

(1) If you share 15 oranges equally among 5 people, how many oranges will each person get? Write a mathematical sentence and the answer.

(2) If you share 16 pencils equally among 4 people, how many pencils will each person get? Write a mathematical sentence and the answer.

(3) You put 24 marbles into bags, with 6 marbles in each bag. How many bags can you fill? Write a mathematical sentence and the answer.

(4) If you cut a 64 cm ribbon into 8 pieces of equal length, how long is each piece in **cm**? Write a mathematical sentence and the answer.



nezakr.natega4dk.net

3-3 Cases for Division

Point!

(Review) Division is used in the following **Cases**.

- When finding **the number per person** by dividing into equal groups.

  Share Of Each Person = **Total number** ÷ **Number of people**

- When finding **the number of people** by dividing a certain amount into equal shares.

  Number of people = **Total number** ÷ **Share Of Each Person**

In a Word Problem, first identify the "Known Information" and the "Question". You can use a Diagram to help you write a mathematical sentence and find the answer.

Warm Up

(1) Which of the problems from Ⓐ to Ⓔ uses a mathematical sentence **6 ÷ 3**? Select all that apply.

Ⓐ 6 people are on the bus. Three people got off. How many people are on the bus?

Ⓑ There are 6 apples. If you divide them equally among 3 people, how many apples does each person get?

Ⓒ You have 6 mandarins. You received 3 more. How many mandarins do you have in total?

Ⓓ You distribute 6 sheets of colored paper to 3 people each. How many sheets of paper are needed in total?

Ⓔ You divide 6 pencils, giving 3 pencils to each person. How many people can you divide them among?

nezakr.natega4dk.net

(2) Complete the following sentence to create a word problem that results in a mathematical sentence **8 ÷ 2**.

There are 8 candies.



How to Solve

(1) Ⓐ 6 − 3 ○○○ ○○○

Ⓑ 6 ÷ 3 ○○ ○○ ○○

Ⓒ 6 + 3 ○○○○○○ ○○○

Ⓓ 6 × 3 ○○○○○○ ○○○○○○ ○○○○○○

Ⓔ 6 ÷ 3 ○○○ ○○○

Answer: Ⓑ, Ⓔ

(2) **Example 1** (Finding the Number per child):

There are 8 candies. If you divide them equally among 2 children, how many candies does each child get?

8 ÷ 2 = 4

Total number ÷ Number of children = Number per child

Example 2 (Finding the Number of people):

There are 8 candies. If you give 2 candies to each person, how many people can receive the candies?

8 ÷ 2 = 4

Total number ÷ Share Of Each Person = Number of people

nezakr.natega4dk.net

Try

(1) Which of the problems from Ⓐ to Ⓔ uses a mathematical sentence **8 ÷ 4**? Select all that apply.

Ⓐ 8 people are on the bus. 4 people got on later. How many people are on the bus?

Ⓑ There are 8 cookies. If you divide them equally among 4 people, how many cookies does each person get?

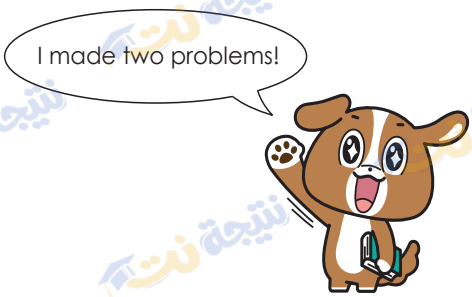
Ⓒ There is a bouquet with 8 flowers. How many flowers are there in 3 such bouquets?

Ⓓ 8 children form groups of 4 people each. How many groups can they form?

Ⓔ You have 8 strawberries. You ate 4 of them. How many strawberries are left?

(2) Complete the following sentence to create a word problem that results in a mathematical sentence **12 ÷ 3**.

There are 12 pencils.



nezakr.natega4dk.net

Exercise

(1) Which of the problems (Ⓐ - Ⓔ) uses a mathematical sentence **9 ÷ 3**? Select all that apply.

Ⓐ: You have 9 sheets of colored paper. If you divide them equally among 3 people, how many sheets does each person get?

Ⓑ: 9 children are playing. 3 more children came later. How many children are there in total?

Ⓒ: There is a box containing 9 puddings. How many puddings are there in 3 boxes?

Ⓓ: You divide 9 bottles of water, giving 3 bottles to each person. How many people can receive the bottles?

Ⓔ: There are 9 children and 3 adults. What is the difference in the number of people?

(2) Complete the following sentence to create a word problem that results in a mathematical sentence **18 ÷ 6**.

There are 18 sheets of colored paper.

(3) Complete the following sentence to create a word problem that results in a mathematical sentence **27 ÷ 9**

There are 27 notebooks.

nezakr.natega4dk.net

3-4 Division to Compare

Point!

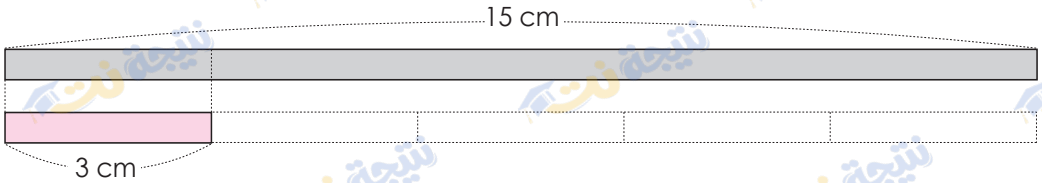
We call "2 groups" the "**2 times**" or "**2 times as many**."
We call "3 groups" the "**3 times**" or "**3 times as many**."

Example 4 groups of 3 cm ⟶ **4 times** the length of 3 cm.

Finding "how many times" is the same as finding "how many groups," so we use division.

In the question "how many times ☐" the number for "☐" becomes the **Divisor**.

Example **How many times** as long as a 3 cm ribbon (divisor) is a 15 cm ribbon?



Mathematical sentence: **15 ÷ 3** = 5

A 15 cm ribbon is 5 groups of 3 cm.

⟶ This is **5 times** the length of the 3 cm ribbon.

Warm Up

(1) Reem has 24 blocks. Sami has 6 blocks. How many times as many blocks as Sami does Reem have? Write a mathematical sentence and the answer.

(2) Gamal is 8 years old, and his grandmother is 64 years old. How many times as old as Gamal is his grandmother? Write a mathematical sentence and the answer.

nezakr.natega4dk.net

How to Solve

(1) Mathematical sentence: $24 \div 6 = 4$

"How many times as many blocks as Sami" — divisor

Answer: 4 times

"how many times ~" → Answer: ~times

(2) Mathematical sentence: $64 \div 8 = 8$

"How many times as old as Gamal" — divisor

Answer: 8 times

Try

(1) Sara has 30 sheets of colored paper, and her younger brother has 5 sheets. How many times as many sheets as her brother does Sara have? Write a mathematical sentence and the answer.

(2) Hassan has 9 blocks. Maryam has 27 blocks. How many times as many blocks as Hassan does Maryam have? Write a mathematical sentence and the answer.

(3) There is a 9 m red ribbon and a 36 m white ribbon. How many times as long as the red ribbon is the white ribbon? Write a mathematical sentence and the answer.

Exercise

(1) Ahmed has 63 sheets of colored paper, and his sister has 7 sheets. How many times as many sheets as his sister does Ahmed have? Write a mathematical sentence and the answer.

(2) There are 32 puddings and 8 jellies. How many times as many puddings as jellies are there? Write a mathematical sentence and the answer.

(3) The teacher has 36 pens, and Hany has 4 pens. How many times as many pens as Hany does the teacher have? Write a mathematical sentence and the answer.



nezakr.natega4dk.net

Try

3-1 **1** Let's do the division.

(1) 12 ÷ 3 (2) 20 ÷ 4 (3) 30 ÷ 5

(4) 18 ÷ 2 (5) 42 ÷ 7 (6) 40 ÷ 8

(7) 6 ÷ 6 (8) 8 ÷ 1 (9) 0 ÷ 7

3-2 **2** (1) If you share 18 strawberries equally among 6 people, how many strawberries will each person get? Write the mathematical sentence and the answer.

(2) There are 32 candies. If you give 8 candies to each person, how many people can share? Write the mathematical sentence and the answer.

(3) If you cut a 56 cm tape into 7 pieces of equal length, how long is each piece in **cm**? Write the mathematical sentence and the answer.

3-3 **3** Complete the following sentence to create a word problem that results in the expression **15 ÷ 5**.

There are 15 pencils.

3-4 **4** Hassan has 7 blocks. Maryam has 35 blocks. How many times as many blocks as Hassan does Maryam have? Write the mathematical sentence and the answer.

nezakr.natega4dk.net

Exercise

3-1 **1** Let's do the division.

(1) 45 ÷ 5 (2) 24 ÷ 3 (3) 16 ÷ 8

(4) 36 ÷ 6 (5) 72 ÷ 9 (6) 35 ÷ 7

(7) 9 ÷ 9 (8) 4 ÷ 1 (9) 0 ÷ 9

3-2 **2** (1) If you share 12 oranges equally among 4 people, how many oranges will each person get? Write the mathematical sentence and the answer.

(2) If you share 21 pencils equally among 3 people, how many pencils will each person get? Write the mathematical sentence and the answer.

(3) You put 48 marbles into bags, with 8 marbles in each bag. How many bags can you fill? Write the mathematical sentence and the answer.

3-3 **3** Complete the following sentence to create a word problem that results in the expression **28 ÷ 7**

There are 28 notebooks.

3-4 **4** There is a 6 m red ribbon and a 42 m white ribbon. How many times as long as the red ribbon is the white ribbon? Write the mathematical sentence and the answer.

nezakr.natega4dk.net

4-1 Adding 3- and 4-Digit Numbers

Point!

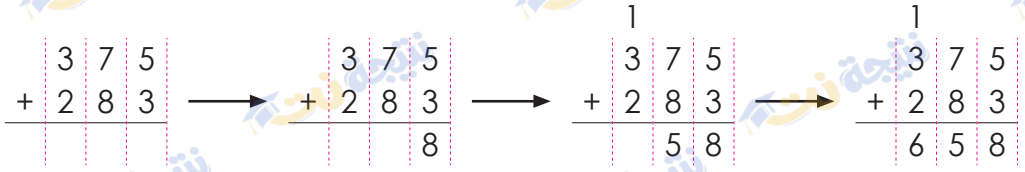
Vertical Addition Steps

❶ Line up the numbers vertically by place value.

❷ Start from the **ones place**, and add the digits in the same place value.

❸ If the sum is 10 or more, **carry over 1** to the next place value.

Example **375 + 283**



❶ Line up the numbers vertically by place value.

❷ Start from the ones place, and add the digits in the same place value.

❸ If the sum is 10 or more, carry over 1 to the next place value.

Warm Up

Let's calculate using the vertical method.

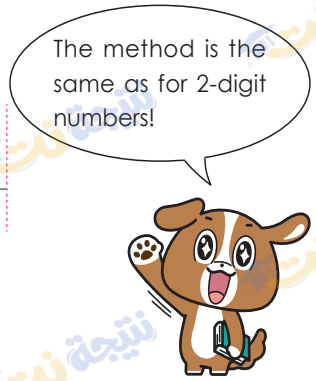
(1) 102 + 79 (2) 407 + 834 (3) 5,423 + 4,378

How to Solve

(1)
$$\begin{array}{r} {\scriptstyle 1} \\ 102 \\ +\ 79 \\ \hline 181 \end{array}$$

(2)
$$\begin{array}{r} {\scriptstyle 1} \\ 407 \\ +\ 834 \\ \hline 1{,}241 \end{array}$$

(3)
$$\begin{array}{r} {\scriptstyle 1\ 1} \\ 5{,}423 \\ +\ 4{,}378 \\ \hline 9{,}801 \end{array}$$



nezakr.natega4dk.net

Try

Let's calculate using the vertical method.

(1) 132 + 416

(2) 509 + 831

(3) 294 + 545

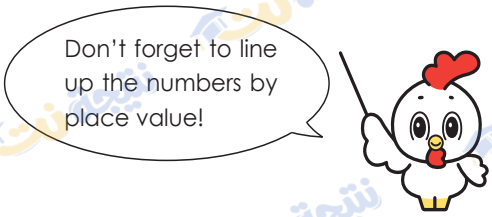
(4) 848 + 74

(5) 345 + 75

(6) 509 + 31

(7) 3,685 + 4,973

(8) 1,953 + 1,297



Exercise

Let's calculate using the vertical method.

(1) 425 + 149

(2) 516 + 243

(3) 345 + 204

(4) 222 + 368

(5) 765 + 436

(6) 557 + 263

(7) 145 + 69

(8) 499 + 31

(9) 524 + 97

(10) 3,328 + 4,794

(11) 4,756 + 2,464

(12) 1,526 + 5,677

nezakr.natega4dk.net

4-2 Subtracting 3- and 4-Digit Numbers (Part 1)

Point!

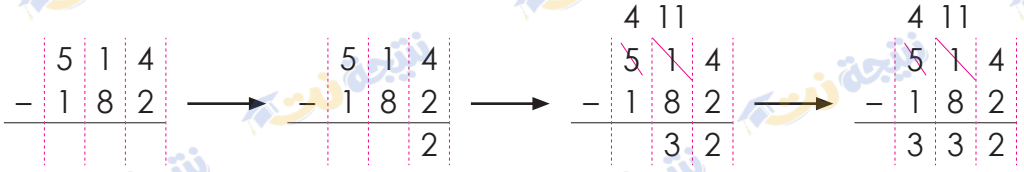
Vertical Subtraction Steps

❶ Line up the numbers vertically by place value.

❷ Start from the **ones place**, and subtract the digits in the same place value.

❸ If you can't subtract, **TAKE** from the next place value.

Example **514 − 182**



❶ Line up the numbers vertically by place value.

❷ Start from the ones place, and subtract the digits in the same place value.

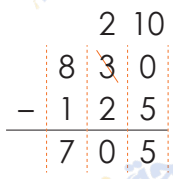
❸ If you can't subtract, TAKE 1 from the next place value.

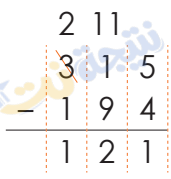
Warm Up

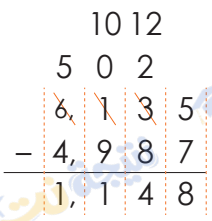
Let's calculate using the vertical method.

(1) 830 − 125 (2) 315 − 194 (3) 6,135 − 4,987

How to Solve

(1)


(2)


(3)


If you can't subtract, TAKE 1 from the next place value each time.

nezakr.natega4dk.net

Try

Let's calculate using the vertical method.

(1) 874 − 531

(2) 738 − 218

(3) 654 − 125

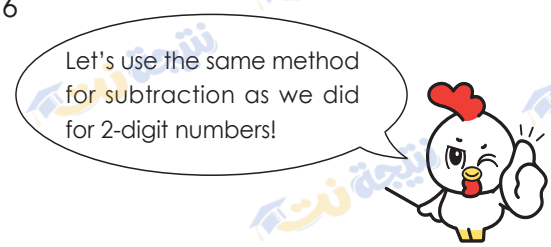
(4) 937 − 784

(5) 881 − 75

(6) 810 − 125

(7) 5,665 − 3,848

(8) 4,450 − 2,576



Exercise

Let's calculate using the vertical method.

(1) 525 − 114

(2) 378 − 116

(3) 676 − 232

(4) 364 − 125

(5) 482 − 126

(6) 738 − 488

(7) 391 − 82

(8) 880 − 61

(9) 691 − 34

(10) 165 − 8

(11) 472 − 7

(12) 811 − 4

(13) 4,622 − 2,185

(14) 7,867 − 3,379

(15) 9,121 − 6,746

nezakr.natega4dk.net

4-3 Subtracting 3- and 4-Digit Numbers (Part 2)

Point!

In vertical subtraction, if you can't subtract the digits, **take 1** from the next place value.

If the next place value is 0, you must take from the next place after that.

Example **503 − 185**

$$\begin{array}{r} 5\ 0\ 3 \\ -\ 1\ 8\ 5 \\ \hline \end{array} \longrightarrow \begin{array}{r} {}^{4}\ {}^{10} \\ 5\ 0\ 3 \\ -\ 1\ 8\ 5 \\ \hline \quad\ \ 8 \end{array} \longrightarrow \begin{array}{r} {}^{\ }\ {}^{\ }\ {}^{9} \\ 4\ {}^{10}\ 13 \\ 5\ 0\ 3 \\ -\ 1\ 8\ 5 \\ \hline 3\ 1\ 8 \end{array}$$

❶ Line up the numbers vertically by place value.

❷ Since the tens place is 0, take 1 from the hundreds place.

❸ Calculate the tens place and the hundreds one by one.

Warm Up

Let's calculate using the vertical method.

(1) 703 − 6 (2) 402 − 275 (3) 1,000 − 464

How to Solve

(1) $\begin{array}{r} 6\ 9\ 13 \\ 7\ 0\ 3 \\ -\quad\ \ 6 \\ \hline 6\ 9\ 7 \end{array}$ (2) $\begin{array}{r} 3\ 9\ 12 \\ 4\ 0\ 2 \\ -\ 2\ 7\ 5 \\ \hline 1\ 2\ 7 \end{array}$ (3) $\begin{array}{r} 0\ 9\ 9\ 10 \\ 1\ 0\ 0\ 0 \\ -\quad 4\ 6\ 4 \\ \hline \quad 5\ 3\ 6 \end{array}$

nezakr.natega4dk.net

Try

Let's calculate using the vertical method.

(1) 305 − 8

(2) 402 − 45

(3) 903 − 684

(4) 1,032 − 673

(5) 1,000 − 217

(6) 1,005 − 394

(7) 7,001 − 624

(8) 1,003 − 216

(9) 1,001 − 359



Exercise

Let's calculate using the vertical method.

(1) 501 − 7

(2) 706 − 8

(3) 605 − 9

(4) 904 − 77

(5) 802 − 84

(6) 402 − 28

(7) 304 − 125

(8) 505 − 339

(9) 702 − 488

(10) 1,031 − 282

(11) 2,060 − 681

(12) 6,107 − 749

(13) 1,000 − 442

(14) 3,000 − 379

(15) 1,005 − 314

nezakr.natega4dk.net

4-4 Addition and Subtraction

Point!

- Use **addition** for problems that ask for the "total," "increase," or "cost."
- Use **subtraction** for problems that ask for "how many more," the "difference," or the "change."
- For word problems, always include the **unit** with your final answer.

Warm Up

(1) You buy shoes for 246 EGP and a bag for 485 EGP. What is the total cost? Write a mathematical sentence and the answer.

(2) There are 243 cows and 187 horses on the farm. How many more cows are there than horses? Write a mathematical sentence and the answer.

(3) You have 1,000 EGP. You bought a backpack for 520 EGP. How much EGP do you have left? Write a mathematical sentence and the answer.

How to Solve

(1) A mathematical sentence: 246 + 485 = 731

Answer: 731 EGP

$$\begin{array}{r} {\scriptstyle 1\ \ 1\ \ \ } \\ 246 \\ +\ 485 \\ \hline 731 \end{array}$$

(2) A mathematical sentence: 243 − 187 = 56

Answer: 56 cows

$$\begin{array}{r} {\scriptstyle \ \ \ 13} \\ {\scriptstyle 1\ \ 3\ 13} \\ 2\ 4\ 3 \\ -\ 1\ 8\ 7 \\ \hline 5\ 6 \end{array}$$

(3) A mathematical sentence: 1,000 − 520 = 480

Answer: 480 EGP

$$\begin{array}{r} {\scriptstyle 0\ 9\ 10\ \ } \\ 1,\!0\ 0\ 0 \\ -\ \ 5\ 2\ 0 \\ \hline 4\ 8\ 0 \end{array}$$

nezakr.natega4dk.net

Try

(1) There are 475 books. If the number increases by 125 books, how many books will there be? Write a mathematical sentence and the answer.

(2) There is a stationery set for 415 EGP and a soccer ball for 825 EGP. How much EGP more expensive is the soccer ball than the stationery set? Write a mathematical sentence and the answer.

(3) You bought a meal for 124 EGP and paid with 200 EGP. How much change do you get back in EGP? Write a mathematical sentence and the answer.

(4) You have a 325-page book and read 141 pages. How many pages are left to read? Write a mathematical sentence and the answer.

Exercise

(1) There are 435 roses blooming. If the number increases by 168 roses, how many roses will there be? Write a mathematical sentence and the answer.

(2) There are 602 children and 518 adults at the zoo. How many more children are there than adults? Write a mathematical sentence and the answer.

(3) You bought a stuffed animal for 164 EGP and paid with 200 EGP. How much change do you get back in EGP? Write a mathematical sentence and the answer.

(4) There are 1,000 sheets of drawing paper. If you use 347 sheets, how many sheets are left? Write a mathematical sentence and the answer.

(5) You bought books for 805 EGP and paid with 1,000 EGP. How much change do you get back in EGP? Write a mathematical sentence and the answer.

nezakr.natega4dk.net

Try

1 Let's calculate using the vertical method.

4-1 (1) 438 + 276 (2) 725 + 189 (3) 2,438 + 5,275

4-2 (4) 432 − 175 (5) 5,634 − 1,289 (6) 8,245 − 3,678

4-3 (7) 304 − 8 (8) 602 − 147 (9) 1,000 − 325

(10) 2,050 − 463 (11) 4,002 − 216 (12) 5,000 − 819

4-4 **2** (1) There are 485 books. If the number increases by 235 books, how many books will there be? Write the mathematical sentence and the answer.

(2) There is a stationery set for 425 EGP and a soccer ball for 805 EGP. How much EGP more expensive is the soccer ball than the stationery set? Write the mathematical sentence and the answer.

(3) You bought a meal for 136 EGP and paid with 200 EGP. How much change do you get back in EGP? Write the mathematical sentence and the answer.

nezakr.natega4dk.net

Exercise

1 Let's calculate using the vertical method.

4-1 (1) 356 + 547 (2) 812 + 458 (3) 6,149 + 2,854

4-2 (4) 618 − 259 (5) 4,726 − 2,184 (6) 9,312 − 4,567

4-3 (7) 805 − 9 (8) 502 − 38 (9) 1,000 − 642

(10) 3,040 − 875 (11) 6,005 − 231 (12) 7,000 − 542

4-4 **2** (1) There are 345 roses blooming. If the number increases by 153 roses, how many roses will there be? Write the mathematical sentence and the answer.

(2) There are 508 children and 419 adults at the zoo. How many more children are there than adults? Write the mathematical sentence and the answer.

(3) You bought a stuffed animal for 159 EGP and paid with 200 EGP. How much change do you get back in EGP? Write the mathematical sentence and the answer.

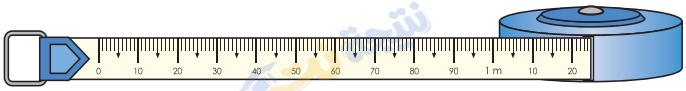
nezakr.natega4dk.net

5-1 Longer Units of Length

Point!

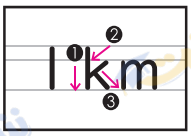
Use a measuring tape to measure the length of long objects or the distance around round objects.

The smallest mark on the measuring tape shows **1 cm**.



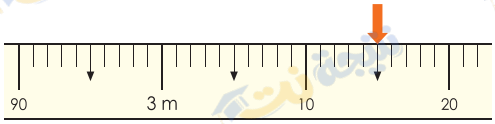
A kilometer is a unit for long distances, and we write it as **km**.

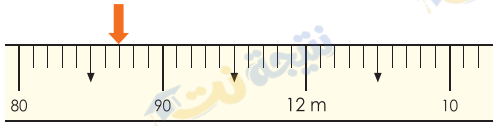
1 km = **1,000** m



Warm Up

(1) Read the length shown by the arrow.

① 

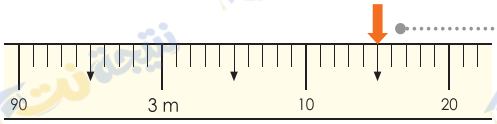
② 

(2) Write the missing number in the box.

① 1 km,50 m = ☐ m

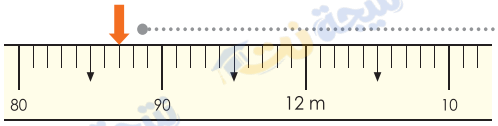
② 1,230 m = ☐ km , ☐ m

How to Solve

(1) ① 

The length at the 15th mark to the right of 3 m.

Answer: 3 m 15 cm

② 

The length at the 87th mark to the left of 12 m.

Answer: 11 m 87 cm

(2) ① 1 km = 1,000 m So, 1 km,50 m = 1,000 m + 50 m = 1,050 m

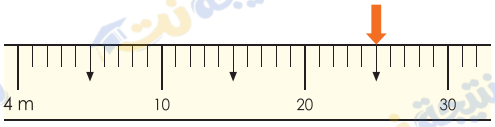
② 1,230 = 1,000 + 230 So, 1,230 m = 1,000 m + 230 m

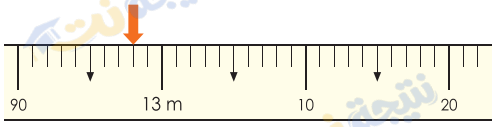
= 1 km, 230 m

nezakr.natega4dk.net

Try

(1) Read the length shown by the arrow.

① 

② 

(2) Write the missing number in the box.

① 2 km = ☐ m

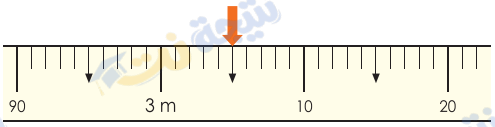
② 1 km,370 m = ☐ m

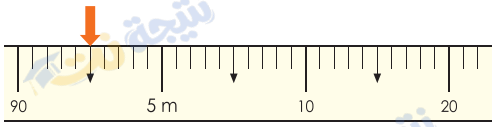
③ 1,080 m = ☐ km, ☐ m

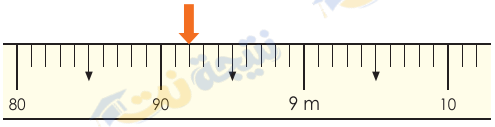
④ 3,760 m = ☐ km, ☐ m

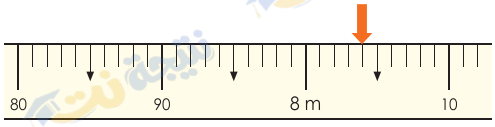
Exercise

(1) Read the length shown by the arrow.

① 

② 

③ 

④ 

(2) Write the missing number in the box.

① 4 km = ☐ m

② 8 km = ☐ m

③ 1 km,930 m = ☐ m

④ 1 km,460 m = ☐ m

⑤ 1 km,80 m = ☐ m

⑥ 2 km,40 m = ☐ m

⑦ 1,050 m = ☐ km, ☐ m

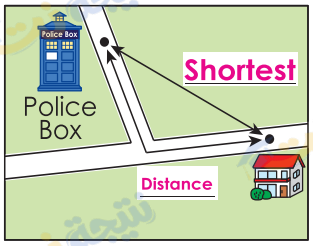
⑧ 2,450 m = ☐ km, ☐ m

nezakr.natega4dk.net

5-2 Distance and Shortest Distance

Point!

The units of length, from smallest to largest, are **mm, cm, m, km**.



The length measured along a path is called the **Distance**.

The length measured in a straight line is called the **Shortest distance**.

Warm Up

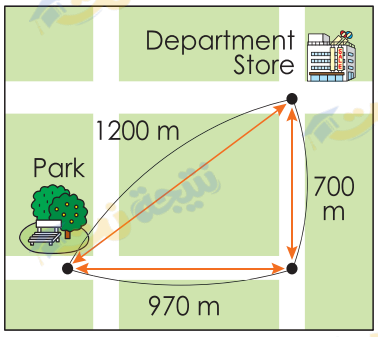
(1) Write the missing unit of length in the box.

① The Shortest distance you can walk in 30 minutes → 2 ☐

② The width of the classroom → 8 ☐

③ The thickness of a math notebook → 5 ☐

(2) Look at the map on the right and answer the questions.



① What is the Distance from the Department Store to the Park in **km** and **m**?

② What is the difference between the Distance and the Shortest distance from the Department Store to the Park in **m**?

How to Solve

(1) ① The Shortest distance you can walk in 30 minutes → 2 km

② The width of the classroom → 6 m

③ The thickness of a math notebook → 5 mm

nezakr.natega4dk.net

(2) ① 700 + 970 = 1,670

Distance is the length measured along a path.

1,670 = 1,000 + 670

1,670 m = 1 km,670 m

Since the question asks for the length in "km and m," we need to convert the units.

Answer: 1 km,670 m

② From Question ① , the Distance is 1,670 m.

Since the Shortest distance is 1,200 m,

1,670 − 1,200 = 470

The difference is calculated using subtraction.

Answer: 470 m

Try

(1) Write the missing unit of length in the box.

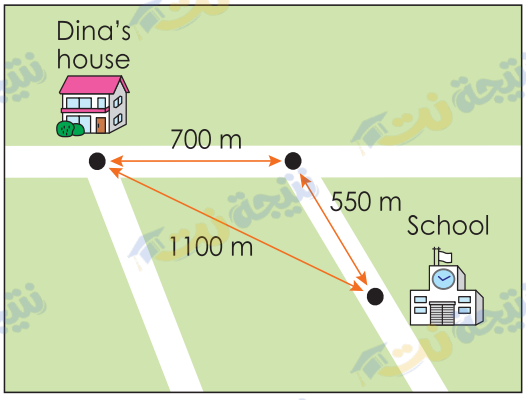
① The Distance walked on the field trip ⟶ 6 ☐

② The width of the blackboard ⟶ 4 ☐

③ The length of a pen ⟶ 15 ☐

④ The thickness of the coin ⟶ 2 ☐

(2) Look at the map below and answer the questions.



Use the unit requested in the question for your answer.



① What is the Distance from the Dina's house to the School in **km** and **m**?

② What is the difference between the distance and the Shortest distance from the Dina's house to the School in **m**?

nezakr.natega4dk.net

Exercise

(1) Write the missing unit of length in the box.

① The length of the hallway ⟶ 15 ☐

② The width of the desk ⟶ 60 ☐

③ The Distance walked in one hour ⟶ 4 ☐

④ The thickness of a notebook ⟶ 4 ☐

⑤ The height of the desk ⟶ 75 ☐

⑥ The width of the classroom ⟶ 7 ☐

⑦ The thickness of a picture book ⟶ 9 ☐

⑧ The route of a marathon course ⟶ 2 ☐

⑨ The length of a ballpoint pen ⟶ 13 ☐

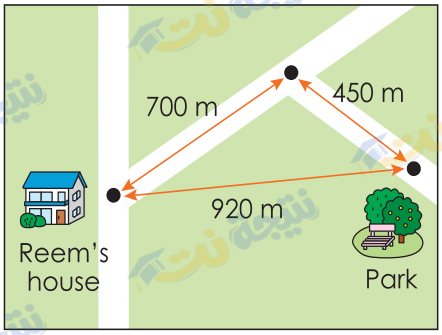
⑩ The length of the pool ⟶ 25 ☐



Now you can measure and express many different lengths!

nezakr.natega4dk.net

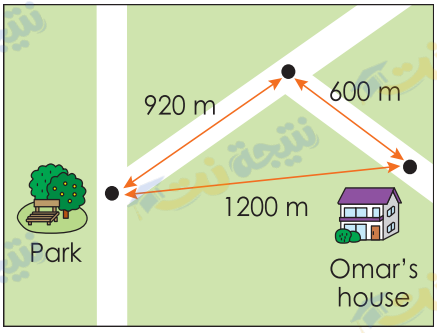
(2) Look at the map below and answer the questions.



① What is the distance from the Reem's house to the Park in **km** and **m**?

② What is the difference between the Distance and the Shortest distance from the Reem's house to the Park in **m**?

(3) Look at the map below and answer the questions.



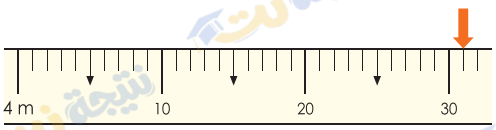
① What is the distance from the Omar's house to the Park in **km** and **m**?

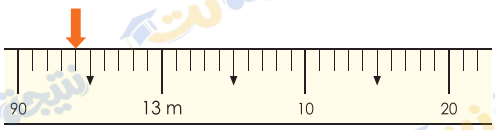
② What is the difference between the Distance and the Shortest distance from the Omar's house to the Park in **m**?

nezakr.natega4dk.net

Try

5-1 **1** (1) Read the length shown by the arrow.

① 

② 

(2) Write the missing number in the box.

① 1 km = ☐ m

② 1 km,720 m = ☐ m

③ 1,010 m = ☐ km, ☐ m

④ 4,950 m = ☐ km, ☐ m

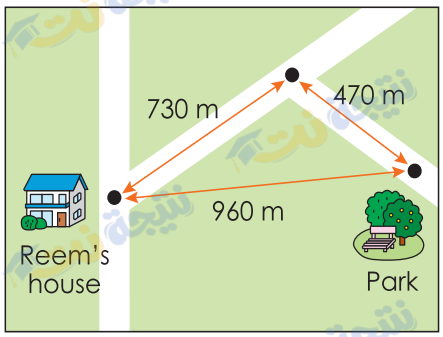
5-2 **2** (1) Write the missing unit of length in the box.

① The route walked on the field trip ⟶ 5 ☐

② The width of the classroom ⟶ 8 ☐

③ The length of a pen ⟶ 13 ☐

(2) Look at the map below and answer the questions.



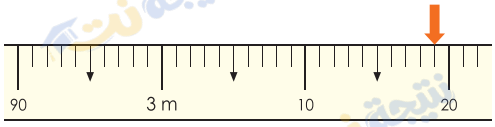
① What is the distance from Reem's house to the Park in **km** and **m**?

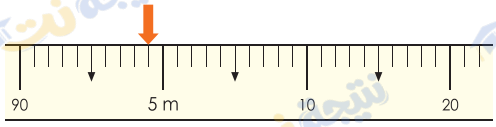
② What is the difference between the distance and the shortest distance from Reem's house to the Park in **m**?

nezakr.natega4dk.net

Exercise

5-1 **1** (1) Read the length shown by the arrow.

① 

② 

(2) Write the missing number in the box.

① 3 km = ☐ m ② 1 km,70 m = ☐ m

③ 1,600 m = ☐ km, ☐ m ④ 8,520 m = ☐ km, ☐ m

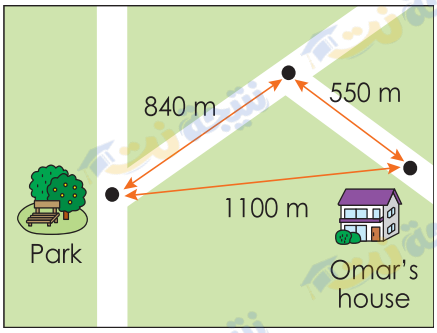
5-2 **2** (1) Write the missing unit of length in the box.

① The distance of a marathon course ⟶ 3 ☐

② The width of the desk ⟶ 65 ☐

③ The thickness of a picture book ⟶ 8 ☐

(2) Look at the map below and answer the questions.



① What is the distance from Omar's house to the Park in **km** and **m**?

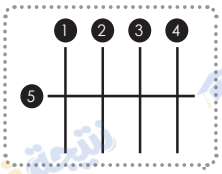
② What is the difference between the distance and the shortest distance from Omar's house to the Park in **m**?

nezakr.natega4dk.net

6-1 Using Tally Marks and Tables

Point!

It is easy to count when we use tally marks to show **groups of five** to organize the data.



Use vertical lines for 1 through 4. Use a horizontal line for the 5th mark.



Tally mark	𝍸	𝍸 𝍸	𝍸 𝍸 𝍸	𝍸 𝍸 𝍸 𝍸	𝍸	𝍸 𝍸	𝍸 𝍸 𝍸	𝍸 𝍸 𝍸 𝍸	𝍸 𝍸 𝍸 𝍸 𝍸	𝍸 𝍸 𝍸 𝍸 𝍸
Number	1	2	3	4	5	6	7	8	9	10

A group of 5 and 1 more makes 6.

Two groups of 5 make 10.

Warm Up

Hany's class collected data on their favorite subjects.

(1) Count the tally marks in the table on the right and write the number for Ⓐ - Ⓔ.

(2) Which subject is liked by the most students?

Math	𝍸 𝍸 𝍸 |
English	𝍸 |
P.E.	𝍸 𝍸 𝍸 |||
Music	||
Art	|||

Favorite Subjects

Type	Number of students
Math	Ⓐ
English	Ⓑ
P.E.	Ⓒ
Other	Ⓓ
Total	Ⓔ

How to Solve

(1)

Type	Number of students
Math	11
English	6
P.E.	13
Other	5
Total	35

Since Music and Art are not listed, combine them and write the total under "Other".

Ⓐ 11 Ⓑ 6 Ⓒ 13 Ⓓ 5 Ⓔ 35

(2) P.E.

nezakr.natega4dk.net

Try

Saly's class conducted a survey about their favorite fruits.

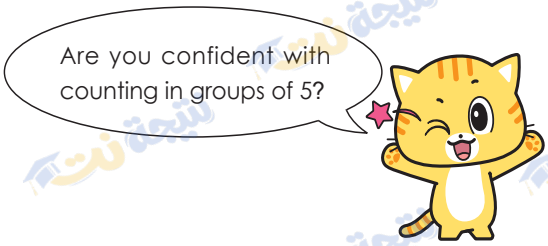
(1) Count the tally marks in the table below and write the appropriate numbers for Ⓐ - Ⓔ.

Apple	𝍸 𝍸 |||
Strawberry	𝍸 ||
Banana	𝍸 ||||
Peach	|||
Grape	||

Favorite Fruits

Type	Number of students
Apple	Ⓐ
Strawberry	Ⓑ
Banana	Ⓒ
Peach	Ⓓ
Grape	Ⓔ

(2) Which fruit is liked by the most students?



Exercise

A survey was conducted on the vehicles that passed by in 10 minutes.

(1) Count the tally marks in the table below and write the appropriate numbers for Ⓐ - Ⓔ.

Passenger Car	𝍸 𝍸 𝍸 ||
Bus	|||
Motorcycle	𝍸 |||
Truck	|||
Taxi	|
Police Car	|

Vehicles that passed

Type	Number of Vehicles
Passenger Car	Ⓐ
Bus	Ⓑ
Motorcycle	Ⓒ
Other	Ⓓ
Total	Ⓔ

(2) Which vehicle passed by the most?

nezakr.natega4dk.net

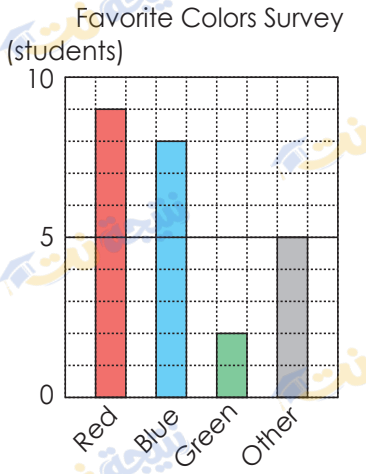
6-2 Reading Bar Graphs

Point!

A graph like the one on the right, which shows the size of numbers using the length of bars, is called a **Bar Graph**.

When data is shown on a bar graph, it becomes easier to compare the amounts.

When reading a bar graph, pay attention to the value shown by each scale mark.



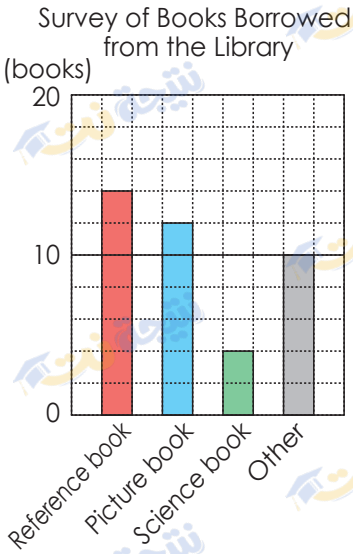
Warm Up

The bar graph on the right shows the books that Fady's class borrowed from the library last week.

(1) How many books does one scale mark on the graph represent?

(2) Which type of book had the most books borrowed?

(3) How many more picture books were borrowed than science books?



How to Solve

(1) The 5 scale marks represent 10 books. So each scale mark represents 2 books.

nezakr.natega4dk.net

(2) Choose the book with the longest bar on the graph. Reference book

(3) Picture books: 12

Science books: 4

$12 - 4 = 8$

8 books

Pay attention to the value of each scale mark.

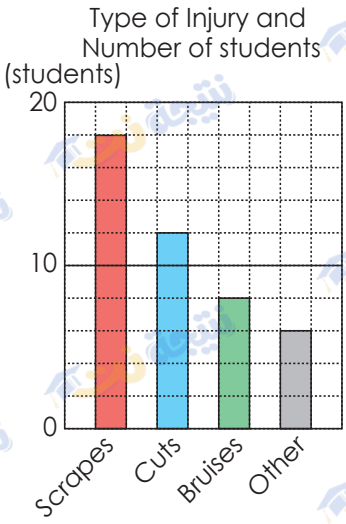
Try

The bar graph on the right shows the number of Grade 3 students who were injured in one month, organized by the type of injury.

(1) How many students does one scale mark on the graph represent?

(2) Which type of injury had the most students?

(3) How many more students had cuts than bruises?





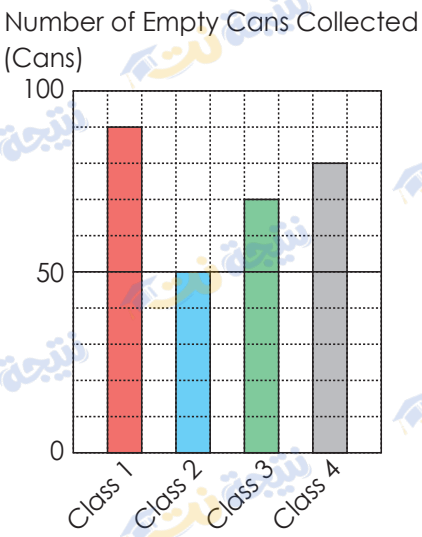
Exercise

The bar graph on the right shows the number of empty cans collected by the Grade 3 classes during a park cleanup.

(1) How many cans does one scale mark on the graph represent?

(2) How many cans did Class 4 collect?

(3) How many more cans did Class 1 collect than Class 3?



nezakr.natega4dk.net

6-3 Drawing Bar Graphs

Point!

Steps for Making a Bar Graph

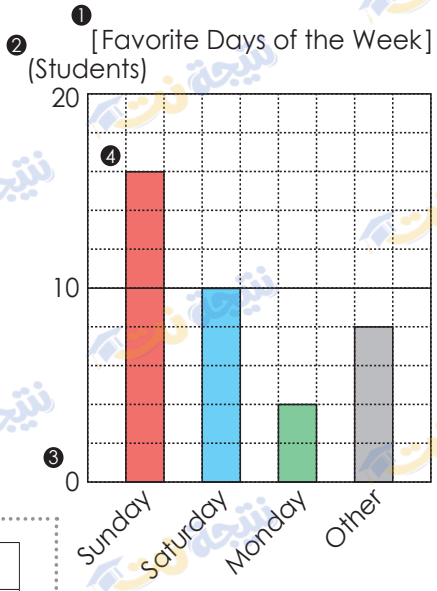
❶ Write the title.

❷ Write the unit that the scale represents.

❸ Decide on the value for one scale mark.

The lowest scale mark must be 0.

❹ Draw the bars to match the numbers.



Favorite Days of the Week

Type	Sunday	Saturday	Monday	Other	Total
Number of Students (Students)	16	10	4	8	38

The title of the bar graph.

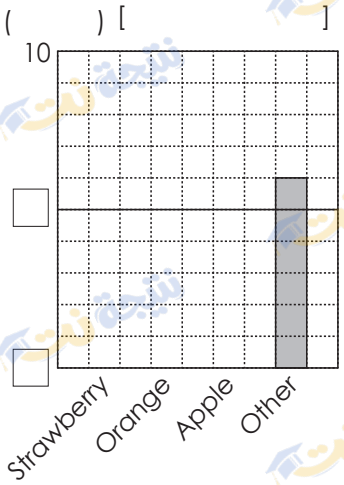
The unit of measure on the bar graph.

Warm Up

Let's make a bar graph from the table below.

Favorite Fruits

Type	Strawberry	Orange	Apple	Other	Total
Numb er of Students (Students)	9	7	3	6	25



(1) Write the title in the brackets [ ].

(2) Write the unit in the parentheses ( ).

(3) Write the scale values in the boxes ☐.

(4) Draw the bars to match the numbers.

nezakr.natega4dk.net

How to Solve

(1) From the table, the Favorite Fruits.

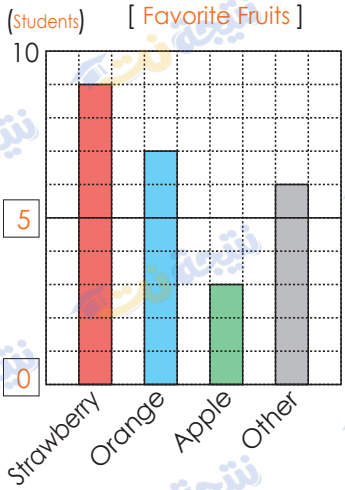
(2) From the table, the Students.

(3) The lowest scale mark is 0.

Since 10 scale marks represent 10, one scale mark represents 1.

Five scale marks above 0 is 5.

(4) Draw the bars to match the numbers.



Try

Let's make a bar graph from the table below.

Favorite Animals

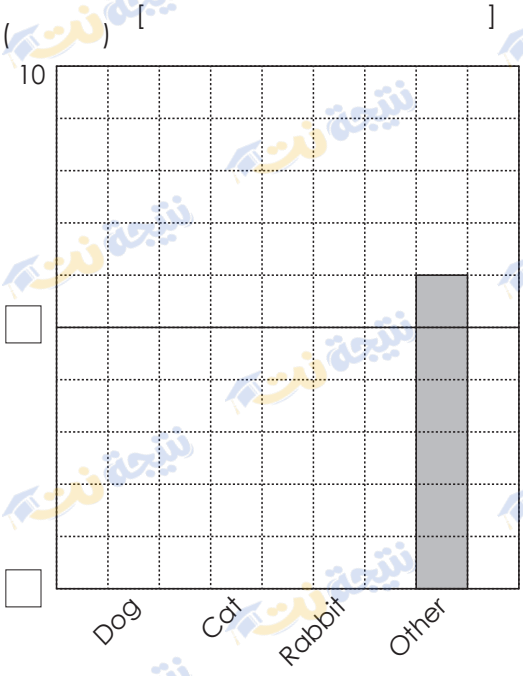
Type	Dog	Cat	Rabbit	Other	Total
Number of Students (Students)	9	8	4	6	27

(1) Write the title in the brackets [ ] .

(2) Write the unit in the parentheses ( ) .

(3) Write the scale values in the boxes ☐ .

(4) Draw the bars to match the numbers.



nezakr.natega4dk.net

Exercise

(1) Let's make a bar graph from the table below.

Favorite Desserts

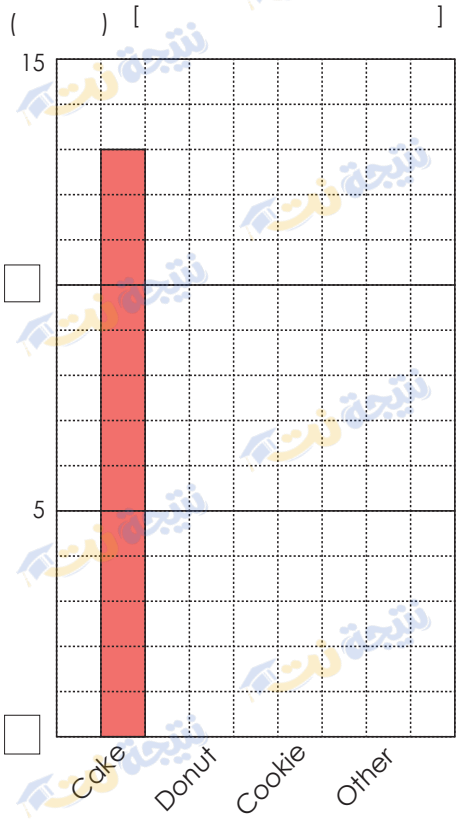
Type	Cake	Donut	Cookie	Other	Total
Number of Students (Students)	13	9	7	5	34

① Write the title in the brackets [ ] .

② Write the unit in the parentheses ( ) .

③ Write the scale values in the boxes ☐ .

④ Draw the bars to match the numbers.



nezakr.natega4dk.net

(2) Let's make a bar graph from the table below.

Favorite Animals

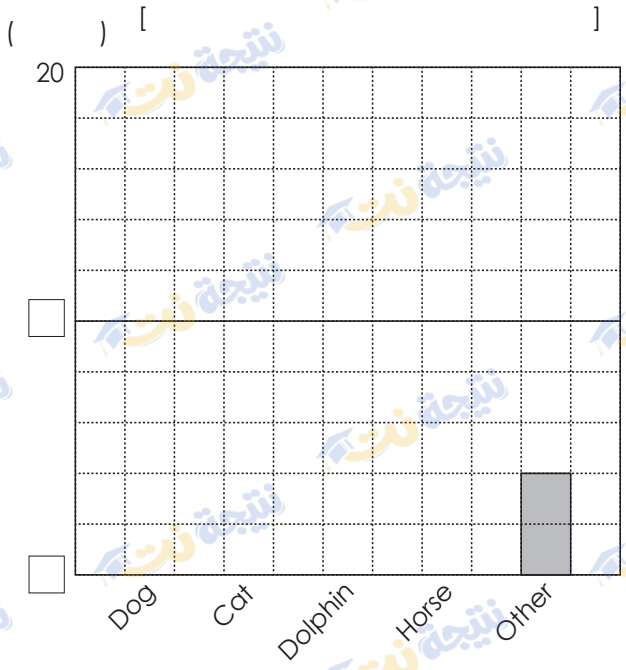
Type	Dog	Cat	Dolphin	Horse	Other	Total
Number of Students (Students)	14	12	6	2	4	38

① Write the title in the brackets [ ] .

② Write the unit in the parentheses ( ) .

③ Write the scale values in the boxes ☐ .

④ Draw the bars to match the numbers.



nezakr.natega4dk.net

6-4 Orgainzing date in tables

Point!

When data is organized in a table like the one below, it's easy to see the whole picture. The total can be found by adding the numbers vertically or horizontally.

Favorite Sports (Grade 3) (Students)

	Class 1	Class 2	Class 3	Total
Soccer	11	9	10	30
Basketball	10	10	9	29
Other	4	6	7	17
Total	25	25	26	76

Total Number of Students who like soccer
11 + 9 + 10 = 30

Number of Students in Class 1
11 + 10 + 4 = 25

Total Number of Students in Grade 3
30 + 29 + 17 = 76, 25 + 25 + 26 = 76

Warm Up

The table below shows the books borrowed by Grade 3 students from the library.

Survey of Books Borrowed (Grade 3) (Books)

	Class 1	Class 2	Class 3	Total
Story Books	11	8	7	Ⓐ
Reference Books	2	3	9	14
Other	4	7	6	17
Total	17	Ⓑ	22	Ⓒ

(1) Write the appropriate numbers for Ⓐ to Ⓒ.

(2) Which type of book was borrowed the most by Grade 3 students?

(3) What does the number for Ⓒ represent?

nezakr.natega4dk.net

How to Solve

(1) Ⓐ : Since we need the total number of students who borrowed Story Books, we add the numbers horizontally.

11 + 8 + 7 = 26

Ⓑ : Since we need the total number of students in Class 2, we add the numbers vertically.

8 + 3 + 7 = 18

Ⓒ : Add the totals vertically.

26 + 14 + 17 = 57

You may also add the totals horizontally.

(2) The total number of students who borrowed Story Books is 26, from (1).

The total number of students who borrowed Reference Books is 14, so the answer is Story Books .

(3) The total number of books borrowed by Grade 3 students .

Try

The table below shows the number of Grade 3 students, organized by class and by gender.

Number of Students by Class and Gender (Grade 3) (Students)

	Class 1	Class 2	Class 3	Total
Boys	18	17	18	53
Girls	17	16	16	Ⓑ
Total	Ⓐ	33	34	Ⓒ

(1) Write the appropriate numbers for Ⓐ to Ⓒ.

(2) How many Girls are in Class 2?

(3) How many students are in Class 3?

(4) What does the number for Ⓒ represent?

nezakr.natega4dk.net

Exercise

(1) The table below shows the number of first, second, and third graders injured in April, organized by the cause of injury.

Causes of Injuries (Grades 1-3) (Students)

	Grade 1	Grade 2	Grade 3	Total
Bumping	7	8	14	Ⓑ
Falling	6	10	4	20
Twisting	5	3	4	12
Other	1	7	8	16
Total	Ⓐ	28	30	Ⓒ

① Write the appropriate numbers for Ⓐ to Ⓒ.

② How many Grade 2 students were injured by falling?

③ How many Grade 3 students were injured by Twisting?

④ How many Grade 3 students were injured in total?

⑤ What does the number for Ⓒ represent?

(2) The table below shows the number of Grade 3 students, organized by class and by gender.

Number of Students by Class and Gender (Grade 3) (Students)

	Class 1	Class 2	Class 3	Total
Boys	17	19	20	56
Girls	23	22	18	Ⓑ
Total	40	Ⓐ	38	Ⓒ

① Write the appropriate numbers for Ⓐ to Ⓒ.

② How many boys are in Class 3?

③ How many girls are in Class 1?

④ What is the difference in the number of boys and girls in Class 2?

⑤ What does the number for Ⓒ represent?

nezakr.natega4dk.net

(3) The table below shows the number of Grade 3 students injured in April, May, and June, organized by location.

Number of Injured Students (Grade 3) (Students)

	April	May	June	Total
Playground	12	5	7	24
Gym	10	9	16	Ⓐ
Classroom	8	6	2	16
Hallway	6	14	10	30
Total	36	Ⓑ	35	Ⓒ

① Write the appropriate numbers for Ⓐ to Ⓒ.

② Which location had the most injured students?

③ Which location had the most number of injuries in April?

④ How many students were injured in June in total?

⑤ What does the number for Ⓒ represent?

nezakr.natega4dk.net

Try

6-1 **1** A survey was conducted on the vehicles that passed by in 10 minutes.

(1) Count the tally marks in the table below and write the appropriate numbers for Ⓐ - Ⓔ.

Passenger Car	𝍸 𝍸 𝍸 𝍸 ||
Bus	𝍸 𝍸 |||
Motorcycle	𝍸 𝍸 |
Truck	𝍸
Taxi	||||
Police Car	|

Vehicles that passed

Type	Number of Vehicles
Passenger Car	Ⓐ
Bus	Ⓑ
Motorcycle	Ⓒ
Other	Ⓓ
Total	Ⓔ

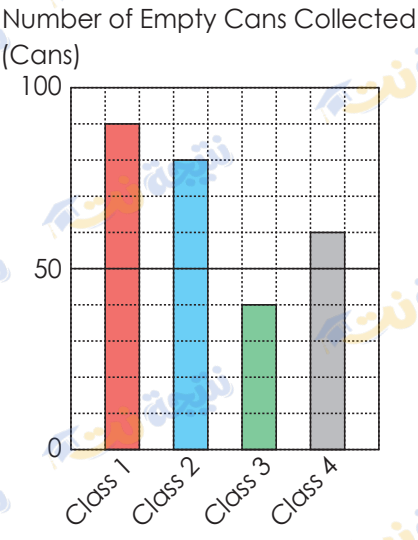
(2) Which vehicle passed by the most?

6-2 **2** The bar graph on the right shows the number of empty cans collected by the Grade 3 classes during a park cleanup.

(1) How many cans does one scale mark on the graph represent?

(2) How many cans did Class 4 collect?

(3) How many more cans did Class 1 collect than Class 3?



nezakr.natega4dk.net

Exercise

6-3 **1** Let's make a bar graph from the table below.

Favorite Animals

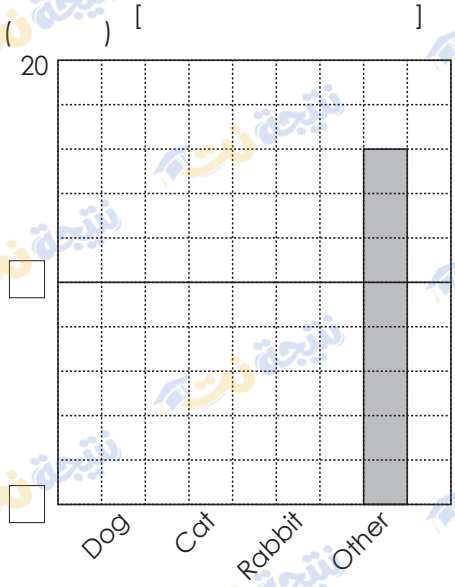
Type	Dog	Cat	Rabbit	Other	Total
Number of Students (Students)	16	14	10	16	56

(1) Write the title in the brackets [ ] .

(2) Write the unit in the parentheses ( ) .

(3) Write the scale values in the boxes ☐ .

(4) Draw the bars to match the numbers.



6-4 **2** The table below shows the number of Grade 3 students, organized by class and by gender.

Number of Students by Class and Gender (Grade 3) (Students)

	Class 1	Class 2	Class 3	Total
Boys	16	15	15	46
Girls	16	17	18	Ⓑ
Total	Ⓐ	32	33	Ⓒ

(1) Write the appropriate numbers for Ⓐ to Ⓒ.

(2) How many girls are in Class 2?

(3) How many students are in Class 3?

(4) What does the number for Ⓒ represent?

nezakr.natega4dk.net

7-1 Mental Math for Addition

Point!

For mental math in addition, start by thinking about the highest place value.

Example

33 + 46 ⟹ ❶ 33 + 40 = 73 — First, calculate only the tens place.

❷ 73 + 6 = 79 — Next, calculate the ones place.

Warm Up

Let's calculate using mental math.

(1) 24 + 30 (2) 37 + 8 (3) 51 + 46 (4) 45 + 38

How to Solve

(1) 24 + 30 = 54

(2) 37 + 8 = 45

(3) 51 + 46

❶ 51 + 40 = 91

❷ 91 + 6 = 97

→ 51 + 46 = 97

(4) 45 + 38

❶ 45 + 30 = 75

❷ 75 + 8 = 83

→ 45 + 38 = 83

nezakr.natega4dk.net

Try

Let's calculate using mental math.

(1) 13 + 20 (2) 27 + 60 (3) 66 + 3 (4) 74 + 6

(5) 87 + 8 (6) 34 + 32 (7) 62 + 15 (8) 27 + 13

(9) 12 + 48 (10) 17 + 59 (11) 32 + 49 (12) 76 + 17

Exercise

Let's calculate using mental math.

(1) 39 + 20 (2) 15 + 60 (3) 31 + 8 (4) 24 + 3

(5) 33 + 7 (6) 45 + 5 (7) 48 + 7 (8) 29 + 5

(9) 24 + 71 (10) 21 + 53 (11) 18 + 73 (12) 39 + 54



nezakr.natega4dk.net

7-2 Mental Math for Subtraction

Point!

For mental math in subtraction as well, start by thinking about the highest place value.

Example

- 62 − 39 ⟹ ❶ 62 − 30 = **32** — First, calculate only the tens place.
  ❷ 32 − 9 = **23** — Next, calculate the ones place.
- 100 − 42 ⟹ ❶ 100 − 40 = **60** — First, calculate only the tens place.
  ❷ 60 − 2 = **58** — Next, calculate the ones place.

Warm Up

Let's calculate using mental math.

(1) 54 − 20 (2) 37 − 8 (3) 51 − 26 (4) 100 − 38

How to Solve

(1) 54 − 20 = 34

(2) 37 − 8 = 29

(3) 51 − 26

❶ 51 − 20 = 31

❷ 31 − 6 = 25

→ 51 − 26 = 25

(4) 100 − 38

❶ 100 − 30 = 70

❷ 70 − 8 = 62

→ 100 − 38 = 62

nezakr.natega4dk.net

Try

Let's calculate using mental math.

(1) 83 − 20 (2) 97 − 60 (3) 66 − 9 (4) 74 − 6

(5) 87 − 8 (6) 84 − 32 (7) 62 − 15 (8) 93 − 17

(9) 72 − 48 (10) 100 − 59 (11) 100 − 47 (12) 100 − 86

Exercise

Let's calculate using mental math.

(1) 63 − 40 (2) 87 − 60 (3) 44 − 8 (4) 31 − 3

(5) 33 − 12 (6) 45 − 23 (7) 61 − 17 (8) 93 − 35

(9) 100 − 71 (10) 100 − 53 (11) 100 − 27 (12) 100 − 84



nezakr.natega4dk.net

Try

7-1 **1** Let's calculate using mental math.

(1) 14 + 30 (2) 25 + 50 (3) 52 + 7

(4) 83 + 5 (5) 68 + 4 (6) 75 + 9

(7) 23 + 41 (8) 51 + 27 (9) 15 + 15

(10) 26 + 36 (11) 47 + 24 (12) 65 + 28

7-2 **2** Let's calculate using mental math.

(1) 54 − 30 (2) 96 − 50 (3) 43 − 7

(4) 92 − 5 (5) 65 − 24 (6) 87 − 43

(7) 42 − 18 (8) 71 − 26 (9) 94 − 35

(10) 100 − 34 (11) 100 − 65 (12) 100 − 88

nezakr.natega4dk.net

Exercise

7-1 **1** Let's calculate using mental math.

(1) 36 + 40 (2) 48 + 20 (3) 41 + 6

(4) 74 + 4 (5) 57 + 6 (6) 89 + 3

(7) 32 + 54 (8) 46 + 13 (9) 18 + 12

(10) 35 + 27 (11) 58 + 34 (12) 77 + 16

7-2 **2** Let's calculate using mental math.

(1) 47 − 20 (2) 85 − 60 (3) 31 − 4

(4) 75 − 8 (5) 56 − 13 (6) 98 − 76

(7) 53 − 29 (8) 82 − 47 (9) 64 − 19

(10) 100 − 21 (11) 100 − 73 (12) 100 − 92

nezakr.natega4dk.net

8-1 Division with a Remainder

Point!

When you divide 17 cookies, giving 3 cookies to each person, you can give them to 5 people, and 2 cookies are left over. We write this as an a mathematical sentence:

17 ÷ 3 = 5 remainder 2

We read this as:

"**Seventeen Divided by three is five remainder two**."

For division with a remainder, we use the multiplication table of the **Divisor**.

Find the largest multiplication answer that is smaller than the Dividend.

Example **17 ÷ 3**

	1	2	3	4	(5)	6	7	8	9
The Multiplication Table for 3	3	6	9	12	(15)	18	21	24	27

Smaller than 17

The answer is **5**

The remainder is calculated by: (Dividend) – (Multiplication Answer).

17 − 15 = 2

The remainder must always be **smaller than the Divisor**.

Warm Up

Let's do division.

(1) 7 ÷ 2

(2) 60 ÷ 8

nezakr.natega4dk.net

How to Solve

(1)

	1	2	3	4	5	6	7	8	9
The Multiplication Table for 2	2	4	6	8	10	12	14	16	18

$7 \div 2 =$ 3 remainder 1 ····· The remainder is 1. We find this by: $7 - 6 = 1$

(2)

	1	2	3	4	5	6	7	8	9
The Multiplication Table for 8	8	16	24	32	40	48	56	64	72

$60 \div 8 =$ 7 remainder 4 ····· The remainder is 4. We find this by: $60 - 56 = 4$

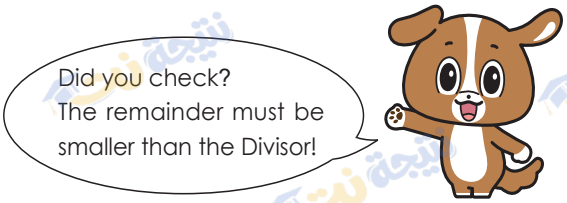
Try

Let's do division.

(1) $8 \div 3$ (2) $9 \div 4$ (3) $15 \div 2$ (4) $16 \div 3$

(5) $53 \div 6$ (6) $13 \div 5$ (7) $62 \div 9$ (8) $26 \div 8$

(9) $21 \div 8$ (10) $51 \div 7$ (11) $47 \div 7$ (12) $50 \div 9$



Exercise

Let's do division.

(1) $9 \div 2$ (2) $5 \div 2$ (3) $17 \div 4$ (4) $22 \div 4$

(5) $15 \div 6$ (6) $47 \div 6$ (7) $34 \div 6$ (8) $29 \div 7$

(9) $16 \div 9$ (10) $31 \div 9$ (11) $28 \div 5$ (12) $28 \div 3$

nezakr.natega4dk.net

8-2 Checking the Answer

Point!

How to Check Division Answers

❶ Check if the remainder is **smaller than the Divisor**.

Example 14 ÷ 4 = 2 remainder 6

×Mistake: The remainder (6) is not smaller than the Divisor (4). You can still divide!

❷ Use the checking a mathematical sentence below to see if the numbers match.

Example 14 ÷ 4 = 3 remainder 2

4 × 3 + 2 = 14

If the number you get is the same as the number being Divided, the answer is correct!

Warm Up

If the answer is correct, write a ✓. If it is wrong, write the correct answer.

(1) 28 ÷ 3 = 8 remainder 4

(2) 43 ÷ 5 = 8 remainder 3

(3) 15 ÷ 4 = 3 remainder 2

How to Solve

(1) 28 ÷ 3 = 8 remainder 4

This answer is wrong because the remainder 4 is bigger than the Divisor 3.

Correct Answer: 28 ÷ 3 = 9 remainder 1

(2) 43 ÷ 5 = 8 remainder 3

The remainder is smaller than the Divisor.

Using the checking a mathematical sentence: 5 × 8 + 3

43 ÷ 5 = 8 remainder 3

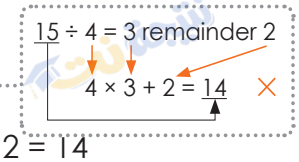
5 × 8 + 3 = 43 ✓

The answer is correct, so write ✓

nezakr.natega4dk.net

(3) 15 ÷ 4 = 3 remainder 2

The remainder is smaller than the Divisor.



Using the checking a mathematical sentence: 4 × 3 + 2 = 14

The number is not the same as the number being Divided, so the answer is wrong.

Correct Answer: 15 ÷ 4 = 3 remainder 3

Try

If the answer is correct, write a ✓. If it is wrong, write the correct answer.

(1) 27 ÷ 5 = 5 remainder 2

(2) 25 ÷ 7 = 3 remainder 1

(3) 50 ÷ 6 = 7 remainder 8

(4) 35 ÷ 4 = 9 remainder 3

(5) 72 ÷ 9 = 7 remainder 9

(6) 53 ÷ 8 = 6 remainder 5

Exercise

If the answer is correct, write a ✓. If it is wrong, write the correct answer.

(1) 23 ÷ 6 = 4 remainder 3

(2) 42 ÷ 5 = 8 remainder 2

(3) 29 ÷ 3 = 8 remainder 5

(4) 37 ÷ 4 = 9 remainder 1

(5) 19 ÷ 3 = 7 remainder 1

(6) 38 ÷ 4 = 9 remainder 1

(7) 49 ÷ 6 = 7 remainder 7

(8) 41 ÷ 9 = 4 remainder 5

(9) 52 ÷ 8 = 6 remainder 5

(10) 62 ÷ 9 = 7 remainder 6

nezakr.natega4dk.net

8-3 Using Division with a Remainder (Part1)

Point!

Pay attention to the units of the Answer and the Remainder.

Example

There are 11 pieces of candy. Each person gets 3 pieces. How many people can you give them candy, and how many are left over?

Answer: You can give candy to 3 **Person**, and 2 **pieces are left over**.

Warm Up

(1) You have 37 candies. If you divide them equally among 5 people, how many candies does each person get, and how many are left over? Write a mathematical sentence and the answer.

(2) You have 27 candies. If you give 4 candies to each person, how many people can you give them to, and how many are left over? Write a mathematical sentence and the answer.

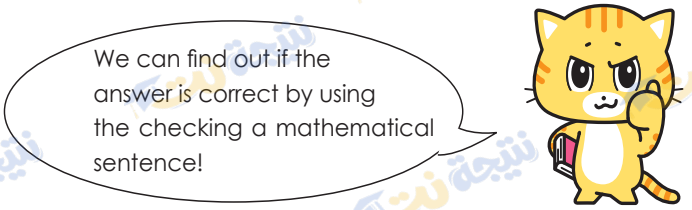
How to Solve

(1) A mathematical sentence: 37 ÷ 5 = 7 remainder 2

Answer: Each person gets 7 candies, and 2 are left over.

(2) A mathematical sentence: 27 ÷ 4 = 6 remainder 3

Answer: You can give them to 6 people, and 3 are left over.



nezakr.natega4dk.net

Try

(1) You have 25 sheets of colored paper. If you divide them equally among 7 people, how many sheets does each person get, and how many sheets are left over? Write a mathematical sentence and the answer.

(2) You have 28 flower seeds. If you give 3 seeds to each person, how many people can you give them to, and how many seeds are left over? Write a mathematical sentence and the answer.

(3) You have 22 candies. If you put 4 candies into each bag, how many bags can you make, and how many are left over? Write a mathematical sentence and the answer.

(4) You have 44 blocks. If you give 8 blocks to each person, how many people can you give them to, and how many blocks are left over? Write a mathematical sentence and the answer.

Exercise

(1) You have 40 sheets of colored paper. If you divide them equally among 6 people, how many sheets does each person get, and how many sheets are left over? Write a mathematical sentence and the answer.

(2) You have a ribbon that is 26 cm long. If you divide it equally among 8 people, how many **cm** does each person get, and how many **cm** are left over? Write a mathematical sentence and the answer.

(3) You have 51 pencils. If you give 9 pencils to each person, how many people can you give them to, and how many pencils are left over? Write a mathematical sentence and the answer.

(4) You have 45 cookies. If you put 6 cookies into each bag, how many bags can you make, and how many are left over? Write a mathematical sentence and the answer.

nezakr.natega4dk.net

8-4 Using Division with a Remainder (Part2)

Point!

You must decide which way is correct based on the question.

- Sometimes you need to think about the remainder and add 1 to the Answer.
- And sometimes, you don't need to think about the remainder.

Warm Up

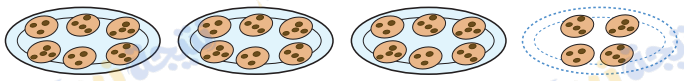
(1) You have 22 cookies. You put 6 cookies on each plate. How many plates do you need to put all the cookies on plates? Write a mathematical sentence and the answer.

(2) You have 32 balls. If you put 6 balls into each box, how many boxes have 6 balls in them? Write a mathematical sentence and the answer.

How to Solve

(1) A mathematical sentence: 22 ÷ 6 = 3 remainder 4

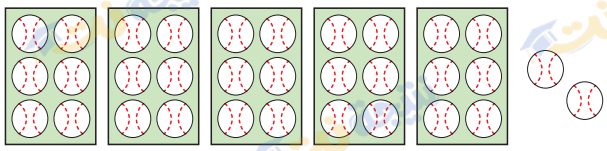
The phrase "to put all the cookies" means the remainder (4 cookies) also needs a plate. We must add 1 to the answer.



Answer: 4 plates

(2) A mathematical sentence: 32 ÷ 6 = 5 remainder 2

The question asks for the number of boxes that have exactly 6 balls. We ignore the remainder (2 balls) because they don't make a full box of 6.



Answer: 5 boxes

nezakr.natega4dk.net

Try

(1) There are 43 children. One seat can fit 5 children. How many seats are needed for everyone to sit down? Write a mathematical sentence and the answer.

(2) A book has 50 pages. If you read 8 pages a day, how many days will it take to finish reading the entire book? Write a mathematical sentence and the answer.

(3) You are making toy cars. You have 38 tires. One car needs 4 tires. How many cars can you make? Write a mathematical sentence and the answer.

(4) You are placing 3 cm-thick picture books on a 26 cm-wide shelf. How many books can you put on the shelf? Write a mathematical sentence and the answer.

Exercise

(1) You have 44 books. If you carry 7 books at a time, how many trips will it take to carry all the books? Write a mathematical sentence and the answer.

(2) There are 50 children. They will ride in carts that hold 6 people each. How many carts are needed for everyone to ride? Write a mathematical sentence and the answer.

(3) You put 19 balls into boxes, 2 balls per box. How many boxes are needed to put all the balls into boxes? Write a mathematical sentence and the answer.

(4) You are putting 34 cans into boxes, 4 cans per box. How many boxes of 4 cans can you make? Write a mathematical sentence and the answer.

(5) A shelf is 38 cm high. If you stack boxes that are 7 cm high, how many boxes can you stack? Write a mathematical sentence and the answer.

nezakr.natega4dk.net

Chapter 8 Review and Practice

Try

8-1 **1** Let's do division.

(1) 6 ÷ 4 (2) 7 ÷ 3 (3) 11 ÷ 5 (4) 14 ÷ 4

(5) 23 ÷ 6 (6) 29 ÷ 4 (7) 33 ÷ 5 (8) 38 ÷ 7

(9) 44 ÷ 8 (10) 52 ÷ 9 (11) 57 ÷ 6 (12) 61 ÷ 7

8-2 **2** If the answer is correct, write a ✓. If it is wrong, write the correct answer.

(1) 20 ÷ 3 = 5 R 5 (2) 32 ÷ 7 = 4 R 4

(3) 47 ÷ 6 = 7 R 3 (4) 11 ÷ 4 = 2 R 3

8-3 **3** (1) You have 41 sheets of colored paper. If you divide them equally among 5 people, how many sheets does each person get, and how many sheets are left over? Write the mathematical sentence and the answer.

(2) You have 33 flower seeds. If you give 7 seeds to each person, how many people can you give them to, and how many seeds are left over? Write the mathematical sentence and the answer.

8-4 **4** (1) There are 53 children. One seat can fit 6 children. How many seats are needed for everyone to sit down? Write the mathematical sentence and the answer.

(2) You are placing 4 cm-thick picture books on a 37 cm-wide shelf. How many books can you put on the shelf? Write the mathematical sentence and the answer.

nezakr.natega4dk.net

Exercise

8-1 **1** Let's do division.

(1) 5 ÷ 3 (2) 8 ÷ 6 (3) 13 ÷ 2 (4) 17 ÷ 3

(5) 22 ÷ 5 (6) 31 ÷ 8 (7) 35 ÷ 4 (8) 41 ÷ 6

(9) 46 ÷ 5 (10) 50 ÷ 8 (11) 55 ÷ 6 (12) 62 ÷ 8

8-2 **2** If the answer is correct, write a ✓. If it is wrong, write the correct answer.

(1) 58 ÷ 9 = 6 R 4 (2) 25 ÷ 8 = 2 R 9

(3) 39 ÷ 4 = 9 R 3 (4) 14 ÷ 5 = 2 R 2

8-3 **3** (1) You have 56 sheets of colored paper. If you divide them equally among 6 people, how many sheets does each person get, and how many sheets are left over? Write the mathematical sentence and the answer.

(2) You have a ribbon that is 60 cm long. If you divide it equally among 9 people, how many **cm** does each person get, and how many **cm** are left over? Write the mathematical sentence and the answer.

8-4 **4** (1) You have 29 books. If you carry 8 books at a time, how many trips will it take to carry all the books? Write the mathematical sentence and the answer.

(2) A shelf is 45 cm high. If you stack boxes that are 8 cm high, how many boxes can you stack? Write the mathematical sentence and the answer.

nezakr.natega4dk.net

9-1 How to Write Big Numbers

Point!

- Review: The number made by collecting ten 1,000s is written as 10,000 and is read as "**ten thousand**".
- Ten 10,000s make **100,000**.
- Numbers are separated into **groups of three digits** from the right: **ones, tens, and hundreds place** are repeated.

Example **865,000**

Hundred Thousands	Ten Thousands	Thousands	,	Hundreds	Tens	Ones
8	6	5	,	0	0	0
Thousands						

This is read as: "Eight Hundred Sixty-Five Thousand."

Warm Up

(1) Write the following numbers in digits.

① Five Hundred Ninety-Six Thousand and Eighty

② The number made by combining:
four 100,000s, seven 10,000s, and two 1,000s.

(2) How many 1,000s make up the number 82,000?

						↓Ones
			,			
			,			

How to Solve

(1) ①

Hundred Thousands	Ten Thousands	Thousands	,	Hundreds	Tens	Ones
5	9	6	,	0	8	0
Thousands						

②

Hundred Thousands	Ten Thousands	Thousands	,	Hundreds	Tens	Ones
4	7	2	,	0	0	0
Thousands						

nezakr.natega4dk.net

(2) It is easy to understand if you line up the digits by their place value, as shown in the picture on the right.

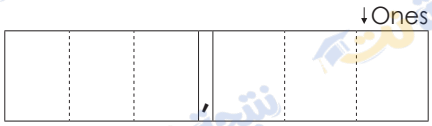
	8	2	,	0	0	0
		1	,	0	0	0

Answer: 82 groups

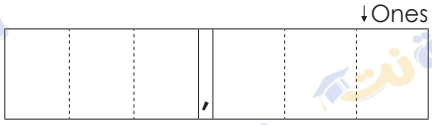
Try

(1) Write the following numbers in digits.

① Nine Hundred Seven Thousand and Four Hundred



② The number made by combining: four 100,000s and six 10,000s.



(2) Write the missing number in the box.

① 19,000 is the number made by collecting ☐ 1,000s.

② 8,000 is the number made by collecting ☐ 1,000s.

(3) Answer the questions about the number **705,036**.

① What is the digit in the Ten Thousand place?

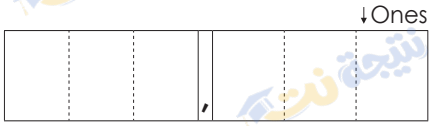
② The digit 7 is in what place?

nezakr.natega4dk.net

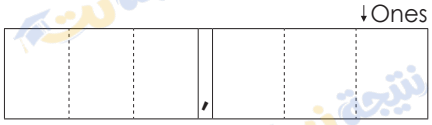
Exercise

(1) Write the following numbers in digits.

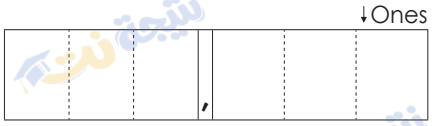
① Three Hundred Nine Thousand and Eight Hundred Twenty



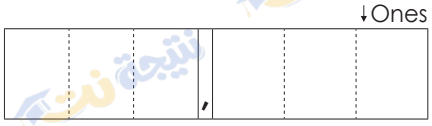
② Five Hundred Forty-Eight Thousand and Three Hundred



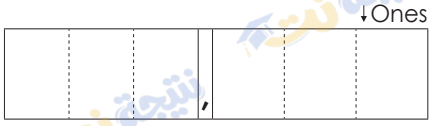
③ Twenty-Six Thousand and Four Hundred Seventeen



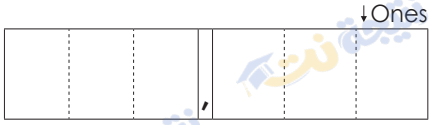
④ The number made by combining: two 100,000s and six 10,000s.



⑤ The number made by combining: five 100,000s and two 10,000s.



⑥ The number made by combining: five 100,000s, two 10,000s, and four 1,000s.



(2) Write the missing number in the box.

① 27,000 is the number made by collecting ☐ 1,000s.

② 64,000 is the number made by collecting ☐ 1,000s.

③ 30,000 is the number made by collecting ☐ 1,000s.

④ 5,000 is the number made by collecting ☐ 1,000s.

nezakr.natega4dk.net

(3) Answer the questions about the number **426,703**.

① What is the digit in the Ten Thousand place?

② The digit 4 is in what place?

(4) Answer the questions about the number **530,192**.

① What is the digit in the Ten Thousand place?

② The digit 5 is in what place?

(5) Answer the questions about the number **258,103**.

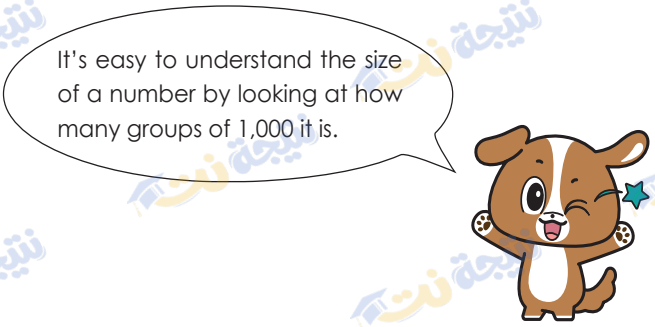
① What is the digit in the Hundred Thousand place?

② The digit 5 is in what place?

(6) Answer the questions about the number **701,289**.

① What is the digit in the Hundred Thousand place?

② The digit 0 is in what place?



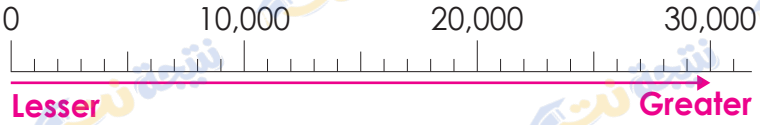
nezakr.natega4dk.net

9-2 The Structure of Big Numbers

Point!

A line like the one below is called a **Number Line**. On a Number Line, numbers get greater as you go to the **right**.

To read the scale of the Number Line, think about what **the smallest unit on the scale** is.



Since 10 scales equal 10,000, the smallest scale unit is 1,000.

For adding and subtracting large numbers, you can think of them by temporarily removing the same number of zeros.

Example **12,000 + 8,000 = 20,000**

You can remove three zeros, calculate 12 + 8, and then add the three zeros back to the answer.

Warm Up

(1) Write the numbers represented by scales Ⓐ and Ⓑ.



(2) Let's do the next calculation.

① 16,000 + 7,000 ② 200,000 − 180,000

How to Solve

(1) The distance between 80,000 and 90,000 is 10,000, and there are 10 small scales. So, the smallest scale unit is 1,000.

Ⓐ 84,000 Ⓑ 115,000

(2) ① 16,000 + 7,000 = 23,000

You can remove three zeros, calculate 16 + 7, and then add the three zeros back to the answer.

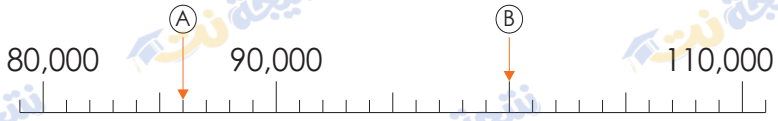
② 200,000 − 180,000 = 20,000

You can remove four zeros, calculate 20 − 18, and then add the four zeros back to the answer.

nezakr.natega4dk.net

Try

(1) Write the numbers represented by scales Ⓐ and Ⓑ.



(2) Let's do the next calculation.

① 5,000 + 8,000

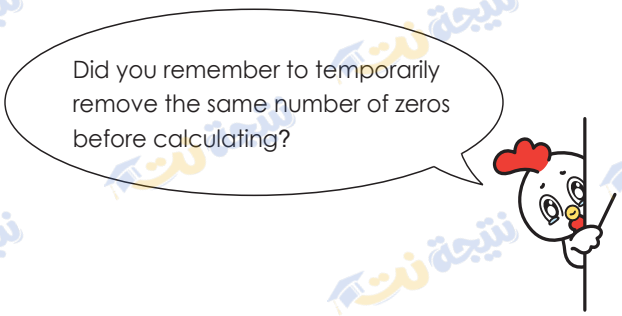
② 90,000 + 170,000

③ 20,000 + 300,000

④ 16,000 − 9,000

⑤ 130,000 − 70,000

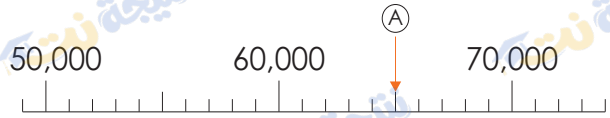
⑥ 300,000 − 140,000

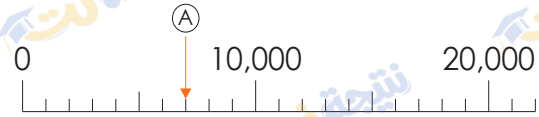


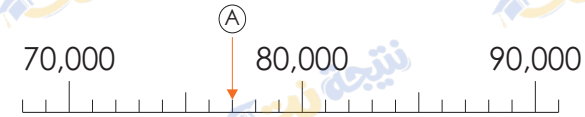
nezakr.natega4dk.net

Exercise

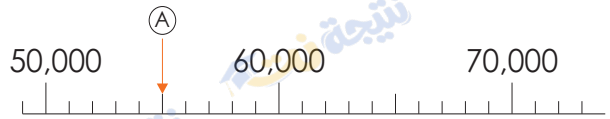
(1) Write the number represented by scale Ⓐ.

① 

② 

③ 

④ 

⑤ 



nezakr.natega4dk.net

(2) Let's do the next calculation.

① 4,000 + 7,000

② 9,000 + 6,000

③ 4,000 + 18,000

④ 6,000 + 25,000

⑤ 80,000 + 140,000

⑥ 70,000 + 330,000

⑦ 2,000 + 60,000

⑧ 3,000 + 50,000

⑨ 60,000 + 800,000

⑩ 90,000 + 400,000

⑪ 23,000 − 8,000

⑫ 41,000 − 3,000

⑬ 53,000 − 7,000

⑭ 15,000 − 8,000

⑮ 230,000 − 50,000

⑯ 610,000 − 20,000

⑰ 700,000 − 260,000

⑱ 300,000 − 250,000

nezakr.natega4dk.net

9-3 Comparing Big Numbers

Point!

The symbol = is called the **Equality Sign**. The symbols **>** and **<** are called **more than and less than**.

We use the Inequality Signs to show the size of numbers. The number on the **open side** of the sign is the greater number.

Example $\underset{\text{Less}}{1} < \underset{\text{Great}}{2}$ $\underset{\text{Great}}{2} > \underset{\text{Less}}{1}$

Warm Up

Write the missing symbol in the box (=, >, or <).

(1) 180,000 ☐ 18,000 (2) 35,000 ☐ 40,000

(3) 385,000 ☐ 384,000

(4) 500,000 ☐ 700,000 − 200,000

How to Solve

(1) The number with more digits is the greater number.

180,000 > 18,000

1	8	0	0	0	0
	1	8	0	0	0

(2) If the numbers have the same number of digits, compare the numbers from the left.

35,000 < 40,000

	3	5	0	0	0
	4	0	0	0	0

(3) Compare the numbers from the left.

385,000 > 384,000

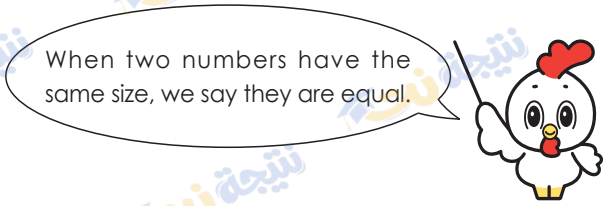
3	8	5	0	0	0
3	8	4	0	0	0

nezakr.natega4dk.net

(4) Calculate the right side first:

700,000 − 200,000 = 500,000

500,000 [=] 700,000 − 200,000



Try

Write the missing symbol in the box (=, >, or <).

(1) 30,800 [ ] 308,000

(2) 80,000 [ ] 50,000

(3) 83,900 [ ] 84,2000

(4) 643,000 [ ] 649,000

(5) 3,000 + 7,000 [ ] 10,000

(6) 600,000 [ ] 800,000 − 300,000

Exercise

Write the missing symbol in the box (=, >, or <).

(1) 21,600 [ ] 216,000

(2) 40,500 [ ] 405,000

(3) 512,000 [ ] 59,200

(4) 30,000 [ ] 50,000

(5) 70,000 [ ] 80,000

(6) 71,800 [ ] 70,800

(7) 895,000 [ ] 875,000

(8) 518,000 [ ] 519,000

(9) 3,000 + 7,000 [ ] 9,000

(10) 9,000 + 6,000 [ ] 15,000

(11) 7,000 + 6,000 [ ] 13,000

(12) 100,000 [ ] 4,000 + 6,000

(13) 15,000 [ ] 8,000 + 8,000

(14) 20,000 [ ] 9,000 + 9,000

nezakr.natega4dk.net

9-4 Numbers Multiplied by 10 and Divided by 10

Point!

- When you multiply a number by 10, its place value moves Left by one, and **one zero** is added to the **right end**.
- When you multiply a number by 100, its place value moves Left by two, and **two zeros** are added to the **right end**.

Thousands	Hundreds	Tens	Ones	
		3	5	×10
	3	5	0	×10
3	5	0	0	×100

- When you divide a number ending in zero by 10, its place value moves right by one, and **one zero** is removed from the **right end**.

Thousands	Hundreds	Tens	Ones	
	3	5	0	÷10
		3	5	

Warm Up

(1) Write the following numbers.

① The number made by multiplying 50 by 10.

② The number made by multiplying 320 by 100.

③ The number made by dividing 200 by 10.

(2) Let's do the next calculation.

① 58 × 10 ② 500 ÷ 10

How to Solve

(1) ① 500 • Add one zero. ② 32,000 • Add two zeros.

③ 20 • Remove one zero.

(2) ① 58 × 10 = 580 • Add one zero. ② 500 ÷ 10 = 50 • Remove one zero.

nezakr.natega4dk.net

Try

(1) Write the following numbers.

① The number made by multiplying 72 by 10.

② The number made by multiplying 746 by 10.

③ The number made by multiplying 37 by 100.

④ The number made by multiplying 900 by 100.

⑤ The number made by dividing 40 by 10.

⑥ The number made by dividing 850 by 10.

(2) Let's do the next calculation.

① 15 × 10 ② 230 × 100 ③ 7,000 ÷ 10

Exercise

(1) Write the following numbers.

① The number made by multiplying 35 by 10.

② The number made by multiplying 40 by 10.

③ The number made by multiplying 254 by 10.

④ The number made by multiplying 94 by 100.

⑤ The number made by multiplying 500 by 100.

⑥ The number made by multiplying 730 by 100.

⑦ The number made by dividing 80 by 10.

⑧ The number made by dividing 600 by 10.

⑨ The number made by dividing 480 by 10.

(2) Let's do the next calculation.

① 37 × 10 ② 80 × 10 ③ 240 × 100

④ 315 ×100 ⑤ 300 ÷ 10 ⑥ 4,000 ÷ 10

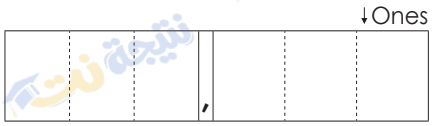
nezakr.natega4dk.net

Chapter 9 Review and Practice

Try

9-1 **1** (1) Write the following numbers in digits.

Eight Hundred Two Thousand and Six Hundred



(2) Answer the questions about the number **509,071**.

① What is the digit in the ten thousands place?

② The digit 5 is in what place?

(3) How many 1,000s make up the number **73,000**?

9-2 **2** (1) Write the numbers represented by scales Ⓐ and Ⓑ.



(2) Let's do the next calculation.

① 8,000 + 4,000

② 90,000 + 400,000

③ 15,000 − 9,000

④ 700,000 − 350,000

9-3 **3** Write the missing symbol in the box (=, >, or <).

(1) 50,600 ☐ 506,000

(2) 40,000 ☐ 30,000 + 10,000

9-4 **4** Let's do the next calculation.

(1) 47 × 10

(2) 520 × 100

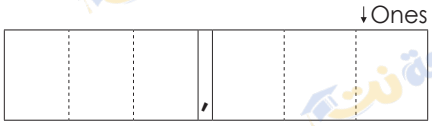
(3) 500 ÷ 10

nezakr.natega4dk.net

Exercise

9-1 **1** (1) Write the following numbers in digits.

Seven Hundred Eleven Thousand and Three Hundred



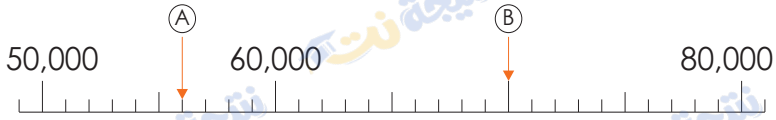
(2) Answer the questions about the number **450,128**.

① What is the digit in the hundred thousands place?

② The digit 5 is in what place?

(3) How many 1,000s make up the number **50,000**?

9-2 **2** (1) Write the numbers represented by scales Ⓐ and Ⓑ.



(2) Let's do the next calculation.

① 5,000 + 16,000 ② 280,000 + 20,000

③ 23,000 − 7,000 ④ 470,000 − 80,000

9-3 **3** Write the missing symbol in the box (=, >, or <).

(1) 861,000 ☐ 860,000 (2) 70,000 + 70,000 ☐ 150,000

9-4 **4** Let's do the next calculation.

(1) 31 × 10 (2) 492 × 100 (3) 9,000 ÷ 10

nezakr.natega4dk.net

10-1 Multiplying by Tens and Hundreds

Point!

When the multiplicand is multiplied by 10, the answer is also **multiplied by 10**.

Example 20×4

$2 \times 4 = 8$

$\times 10$ $\times 10$

$20 \times 4 = 80$ — Ten times the answer of 2×4.

When the multiplicand is multiplied by 100, the answer is also **multiplied by 100**.

Example 200×4

$2 \times 4 = 8$

$\times 100$ $\times 100$

$200 \times 4 = 800$ — One hundred times the answer of 2×4.

Warm Up

(1) Let's do the multiplication.

① 30×6 ② 500×7

(2) You bought 4 balls that cost 300 EGP each. What is the total cost in EGP?

How to Solve

(1)① $3 \times 6 = 18$ ($\times 10$, $\times 10$)

$30 \times 6 = 180$

② $5 \times 7 = 35$ ($\times 100$, $\times 100$)

$500 \times 7 = 3{,}500$

(2) A mathematical sentence: $300 \times 4 = 1{,}200$ — $3 \times 4 = 12$

Answer: 1,200 EGP — Write your answer with the unit.

nezakr.natega4dk.net

Try

(1) Let's do the multiplication.

① 30 × 2 ② 80 × 3 ③ 50 × 6

④ 900 × 7 ⑤ 600 × 4 ⑥ 200 × 5

(2) You bought 6 chocolates that cost 20 EGP each. What is the total cost in EGP? Write a mathematical sentence and the answer.

(3) You bought 8 picture books that cost 300 EGP each. What is the total cost in EGP? Write a mathematical sentence and the answer.

Exercise

(1) Let's do the multiplication.

① 40 × 2 ② 60 × 8 ③ 40 × 5

④ 700 × 7 ⑤ 200 × 8 ⑥ 500 × 6

(2) You bought 3 notebooks that cost 60 EGP each. What is the total cost in EGP? Write a mathematical sentence and the answer.

(3) A bottle of juice costs 50 EGP. If you buy 6 bottles, what is the total cost in EGP? Write a mathematical sentence and the answer.

(4) You bought 8 keychains that cost 300 EGP each. What is the total cost in EGP? Write a mathematical sentence and the answer.

(5) A bouquet costs 200 EGP. If you buy 5 bouquets, what is the total cost in EGP? Write a mathematical sentence and the answer.

nezakr.natega4dk.net

10-2 Vertical Multiplication (2-digit × 1-digit)

Point!

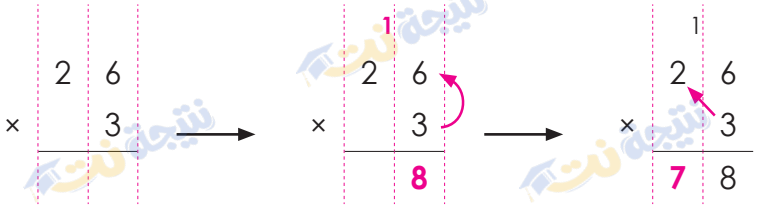
When calculating multiplication using the vertical method:

❶ Align the place values vertically.

❷ Start the calculation from the **ones place**. Start from the right side.

Remember to carry over.

Example **26 × 3**



Align the place values vertically.

3 × 6 = 18
Write 8 in the ones place and carry over 1 to the tens place.

3 × 2 = 6
Add the carried over 1: 6 + 1 = 7.
Write 7 in the tens place.

Warm Up

Let's calculate using the vertical method.

(1) 43 × 2 (2) 75 × 4 (3) 79 × 8

How to Solve

(1)
$$\begin{array}{r} 43 \\ \times\ \ 2 \\ \hline 86 \end{array}$$

(2)
$$\begin{array}{r} {\scriptstyle 2}\ \ \\ 75 \\ \times\ \ 4 \\ \hline 300 \end{array}$$

Write the carried number small above the tens column.

(3)
$$\begin{array}{r} {\scriptstyle 7}\ \ \\ 79 \\ \times\ \ 8 \\ \hline 632 \end{array}$$

nezakr.natega4dk.net

Try

Let's calculate using the vertical method.

(1) 21 × 4 (2) 23 × 3 (3) 72 × 2

(4) 16 × 5 (5) 84 × 9 (6) 15 × 6

(7) 34 × 3 (8) 65 × 8 (9) 49 × 9



Exercise

Let's calculate using the vertical method.

(1) 23 × 2 (2) 41 × 2 (3) 31 × 3

(4) 63 × 3 (5) 83 × 2 (6) 73 × 3

(7) 18 × 4 (8) 14 × 5 (9) 25 × 3

(10) 68 × 7 (11) 38 × 7 (12) 54 × 6

(13) 15 × 7 (14) 35 × 3 (15) 29 × 7

(16) 69 × 6 (17) 28 × 8 (18) 79 × 4

nezakr.natega4dk.net

10-3 Vertical Multiplication (3-digit × 1-digit)

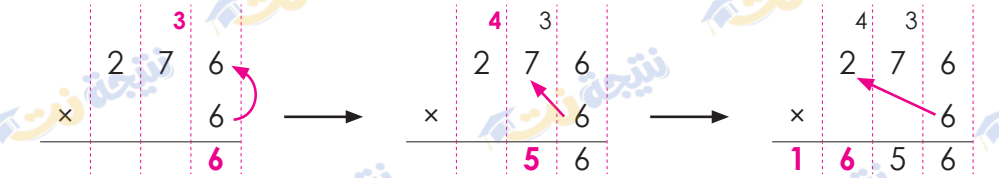
Point!

3-digit × 1-digit multiplication is done the same way as 2-digit × 1-digit:

❶ Align the place values vertically.

❷ Start the calculation from the **ones place**, in order.

Example 276 × 6



6 × 6 = 36
Write 6 in the ones place and carry over 3 to the tens place.

6 × 7 = 42
Write 5 and carry over 4 to the hundreds place.

6 × 2 = 12
Add the carried-over 4, and the hundreds place becomes 6. Carry the 1 up to the thousands place.

Warm Up

Let's calculate using the vertical method.

(1) 148 × 2 (2) 703 × 9 (3) 387 × 6

How to Solve

(1)
$$\begin{array}{r} {\scriptstyle 1} \\ 148 \\ \times\ \ 2 \\ \hline 296 \end{array}$$

(2)
$$\begin{array}{r} {\scriptstyle 2} \\ 703 \\ \times\ \ 9 \\ \hline 6327 \end{array}$$

(3)
$$\begin{array}{r} {\scriptstyle 5\ 4} \\ 387 \\ \times\ \ 6 \\ \hline 2322 \end{array}$$

nezakr.natega4dk.net

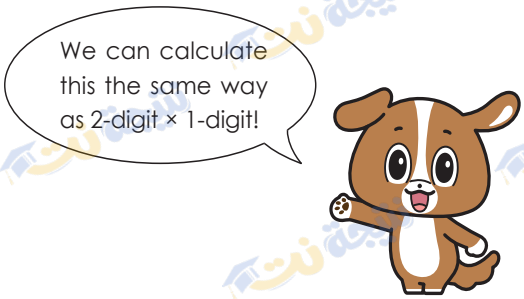
Try

Let's calculate using the vertical method.

(1) 312 × 3 (2) 426 × 2 (3) 183 × 3

(4) 468 × 2 (5) 907 × 8 (6) 341 × 7

(7) 648 × 3 (8) 368 × 9 (9) 667 × 8



Exercise

Let's calculate using the vertical method.

(1) 321 × 3 (2) 113 × 2 (3) 124 × 6

(4) 124 × 3 (5) 182 × 4 (6) 484 × 2

(7) 197 × 3 (8) 375 × 2 (9) 236 × 4

(10) 608 × 7 (11) 706 × 5 (12) 251 × 7

(13) 450 × 3 (14) 426 × 7 (15) 237 × 8

(16) 385 × 6 (17) 588 × 9 (18) 745 × 7

nezakr.natega4dk.net

10-4 Rules of Multiplication

Point!

When multiplying three numbers, the answer will be **the same** whether you calculate the first two numbers first, or the last two numbers first.

Example

$40 \times 2 \times 3$

$(40 \times 2) \times 3 = 80 \times 3$

$= 240$

$40 \times (2 \times 3) = 40 \times 6$

$= 240$

The answer is the same.

In multiplication of three numbers, you can calculate easily by multiplying the two smallest numbers first.

Warm Up

Let's calculate using clever ways.

(1) $50 \times 3 \times 3$ (2) $451 \times 2 \times 5$ (3) $148 \times 2 \times 3$

How to Solve

(1) $50 \times 3 \times 3 = 50 \times (3 \times 3)$

$= 50 \times 9$

$= 450$

- Multiply the two smaller numbers first.
- Put parentheses ( ) around the numbers you calculate first.

(2) $451 \times 2 \times 5 = 451 \times (2 \times 5)$

$= 451 \times 10$

$= 4{,}510$

(3) $148 \times 2 \times 3 = 148 \times (2 \times 3)$

$= 148 \times 6$

$= 888$

$$\begin{array}{r} 148 \\ \times \quad 6 \\ \hline 888 \end{array}$$

nezakr.natega4dk.net

Try

Let's calculate using clever ways.

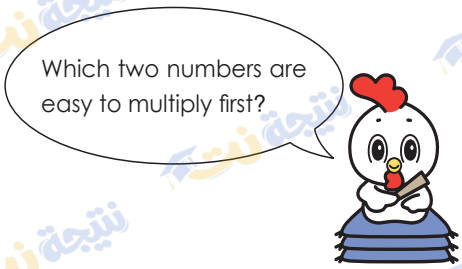
(1) 80 × 2 × 4

(2) 300 × 3 × 2

(3) 57 × 5 × 2

(4) 136 × 2 × 5

(5) 135 × 4 × 2



Exercise

Let's calculate using clever ways.

(1) 70 × 3 × 3

(2) 90 × 2 × 4

(3) 60 × 3 × 2

(4) 800 × 2 × 3

(5) 600 × 4 × 2

(6) 900 × 3 × 3

(7) 89 × 5 × 2

(8) 42 × 5 × 2

(9) 265 × 2 × 5

(10) 905 × 2 × 5

(11) 189 × 4 × 2

(12) 372 × 3 × 2

(13) 281 × 2 × 4

(14) 675 × 2 × 2

(15) 256 × 2 × 4

nezakr.natega4dk.net

10-5 Using Multiplication

Point!

When solving word problems:

- Write a mathematical sentence and the answer.
- Always include the **unit** in the answer.

Warm Up

(1) There are 5 buses. If 43 people ride in each bus, how many people can ride in total? Write a mathematical sentence and the answer.

(2) A cake costs 138 EGP. There are 3 cakes in one box. If you buy 2 boxes, what is the total cost in EGP? Write one a mathematical sentence and the answer.

How to Solve

(1) A mathematical sentence: $43 \times 5 = 215$

$$\begin{array}{r} {\scriptstyle 1} \\ 43 \\ \times\ \ 5 \\ \hline 215 \end{array}$$

Answer: 215 people

"How many people can ride?" → Answer: ☐ people

(2) A mathematical sentence: $138 \times 3 \times 2 = 138 \times (3 \times 2)$

$= 138 \times 6$

$= 828$

$$\begin{array}{r} {\scriptstyle 2\ 4} \\ 138 \\ \times\ \ \ 6 \\ \hline 828 \end{array}$$

Answer: 828 EGP

"What is the total cost in EGP?" → Answer: ☐ EGP

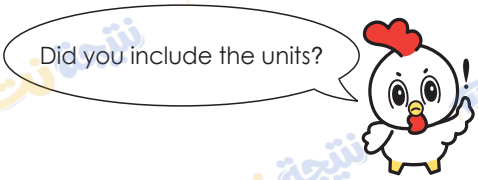
nezakr.natega4dk.net

Try

(1) You make 6 bundles of flowers. Each bundle has 37 flowers. How many flowers do you need in total? Write a mathematical sentence and the answer.

(2) You ran around a pond 5 times. The length of one lap is 139 m. How many meters did you run in total? Write a mathematical sentence and the answer.

(3) A cake costs 125 EGP. There are 4 cakes in one box. If you buy 2 boxes, what is the total cost in EGP? Write one a mathematical sentence and the answer.



Exercise

(1) 58 people rode on 3 buses. How many people rode in total? Write a mathematical sentence and the answer.

(2) There are 6 boxes of snacks, and each box contains 24 snacks. How many snacks are there in total? Write a mathematical sentence and the answer.

(3) You will run around a pond that is 168 m long for 3 laps. How many meters will you run in total? Write a mathematical sentence and the answer.

(4) A pencil costs 20 EGP. There are 5 pencils in one box. If you buy 2 boxes, what is the total cost in EGP? Write one a mathematical sentence and the answer.

(5) A sandwich costs 105 EGP. There are 2 sandwiches in one box. If you buy 2 boxes, what is the total cost in EGP? Write one a mathematical sentence and the answer.

(6) There are 135 sheets of colored paper in one bundle, and 4 bundles in one box. If you buy 2 boxes, how many sheets of colored paper are there in total? Write one a mathematical sentence and the answer.

nezakr.natega4dk.net

Chapter 10 Review and Practice

Try

10-1 **1** Let's do the multiplication.

(1) 60 × 4 (2) 80 × 2 (3) 50 × 7

(4) 400 × 3 (5) 700 × 6 (6) 900 × 8

2 Let's calculate using the vertical method.

10-2 (1) 42 × 2 (2) 37 × 3 (3) 68 × 5

10-3 (4) 213 × 3 (5) 507 × 2 (6) 145 × 4

10-4 **3** Let's calculate using clever ways.

(1) 20 × 3 × 3 (2) 40 × 2 × 4 (3) 129 × 5 × 2

(4) 11 × 4 × 2 (5) 50 × 2 × 5 (6) 231 × 2 × 2

10-5 **4** (1) You make 7 bundles of flowers. Each bundle has 28 flowers. How many flowers do you need in total? Write the mathematical sentence and the answer.

(2) A cake costs 138 EGP. There are 5 cakes in one box. If you buy 2 boxes, what is the total cost in EGP? Write one mathematical sentence and the answer.

nezakr.natega4dk.net

Exercise

10-1 **1** Let's do the multiplication.

(1) 40 × 6 (2) 70 × 3 (3) 90 × 5

(4) 300 × 2 (5) 800 × 4 (6) 200 × 9

2 Let's calculate using the vertical method.

10-2 (1) 31 × 3 (2) 26 × 4 (3) 75 × 6

10-3 (4) 321 × 2 (5) 604 × 3 (6) 238 × 5

10-4 **3** Let's calculate using clever ways.

(1) 30 × 2 × 3 (2) 50 × 2 × 4 (3) 246 × 2 × 5

(4) 13 × 3 × 2 (5) 70 × 5 × 2 (6) 124 × 2 × 2

10-5 **4** (1) 53 people rode on 5 buses. How many people rode in total? Write the mathematical sentence and the answer.

(2) A sandwich costs 110 EGP. There are 2 sandwiches in one box. If you buy 3 boxes, what is the total cost in EGP? Write one mathematical sentence and the answer.

nezakr.natega4dk.net

Notes

nezakr.natega4dk.net

Notes

nezakr.natega4dk.net

عدد صفحات الكتاب	ورق الغلاف	ورق المتن	مقاس الكتاب	رقم الكتاب
١٢٤	٢٠٠ جرام	٨٠ جرام	١٩×٢٧	٣٠/٣/١١/١٥/٤٥/١٠٣٧

رقم الايـــداع : ٢٠٢٦/١٤٨٠١

الترقيم الدولى : 978-633-8530-20-4

دار درويش للطباعة
الرفاعى ابراهيم درويش

طباعة-نشر-توزيع

EDUCATION SPRINGS NEW LIFE

SPRIX

class	name

nezakr.natega4dk.net