

وزارة التربية والتعليم و التعليم الفنى

الإدارة المركزية للتعليم العام

إدارة تنمية مادة الرياضيات

برعاية معالي وزير التربية والتعليم و التعليم العام

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وتوجيهات رئيس الإدارة المركزية للتعليم العام

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إشراف علمي

مستشار الرياضيات

أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات

للصف الأول الثانوي لغات

الفصل الدراسى الأول

للعام الدراسي ٢٠٢٦ / ٢٠٢٧

الأسبوع الثالث

لجنة الإعداد

أ/ إيهاب فتحى أ/ عصام الجزار أ/ نفيسة رمضان

ترجمة

أ/ أمانى الشهاوى أ/ محمود البشلاوى أ/ بلال محمد رومية

مراجعة

أ/ شريف البرهامى أ / محمود درويش

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First secondary grade - Classroom performance - Third week

1) Find the values of x and y that satisfy the following equation:
$(3x - y) + (x - 3y)i = 5 - i$

2) Find the product of each of the following in simplest form:
(a) $(2 + \sqrt{-9})\ (2 - 3i)$ (b) $(1 + i)^6$

3) Put the number $\frac{2-3i}{3+2i}$ as a complex number, $i^2 = -1$

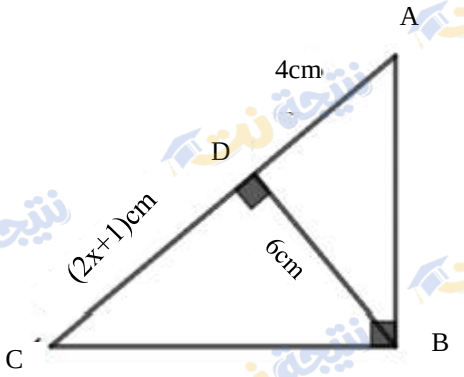
4) Find in π the radian measure of the angles whose measure is
(a) $30°$ (b) $90°$ (c) $180°$ (d) $390°$ (e) $-135°$
(f) $-750°$ (g) $25° 18'$ (h) $160° 50' 48''$

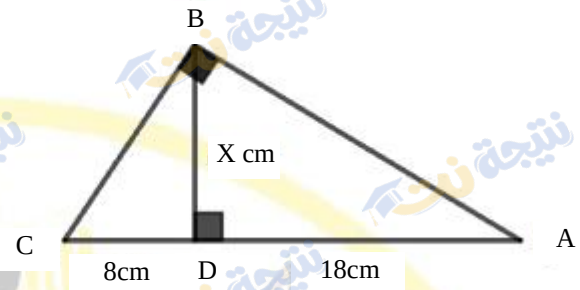
5) Find the degree measure of the angles whose measures are as follows:
(a) 0.94 rad (b) 2.27 rad (c) 1.2 rad (d) -1.05 rad

6) A central angle of 120° encloses an arc of length 10 cm. Calculate the length of the radius of its circle to the nearest tenth.

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7) In each of the following figures, find the numerical values of x.





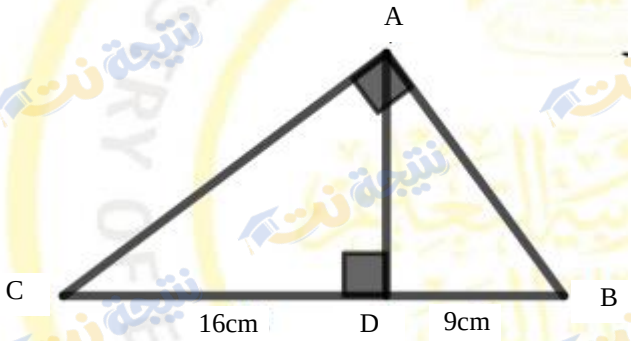
8) In the opposite figure:

ΔABC is a right triangle at A , $\overline{AD} \perp \overline{BC}$

BD = 9 cm, DC = 16 cm

First: Write the triangles that are similar to ΔABC

Second: Find: The lengths of the following sides $\overline{AB}$, $\overline{AC}$, $\overline{AD}$



9) In the opposite figure:

ABC is a triangle in which AB = 6 cm,

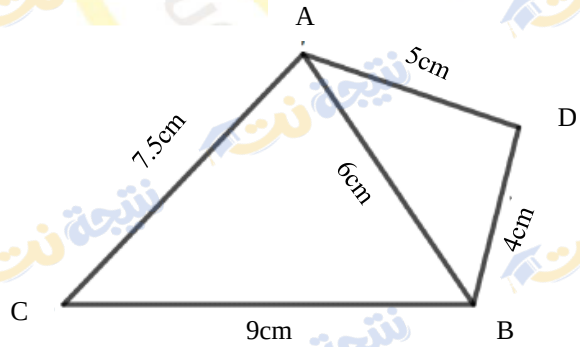
BC = 9 cm, AC = 7.5 cm,

D is a point outside the triangle ABC

such that DB = 4 cm, DA = 5 cm

First: Prove that: $\Delta ABC \sim \Delta DBA$

Second: Prove that $\overrightarrow{AB}$ bisects $\angle DBC$



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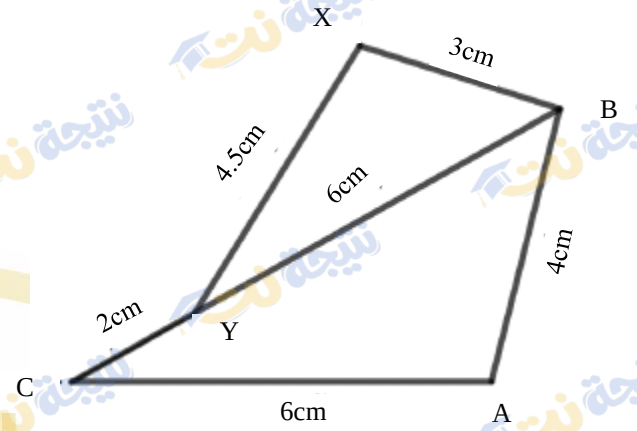
10) In the opposite figure:

Prove that:

First: ΔABC ~ ΔXBY

Second: $\overrightarrow{BC}$ bisects ∠ABX

(Such that: B, Y, C are colinear)



First secondary grade – Homework performance - Third week

1) Find the values of x and y that satisfy the following equation:

$(2x - 3y) + (3x - y)i = 7i$

2) Find the following in simplest form:

(b) $(3 + 2i)(3 - 3i)$ (b) $(1 + i)^{24}$

3) Put the number $\frac{3-i}{3+i}$ as a complex number, where $i^2 = -1$

4) Find in π the radian measure of the angles whose measure is

(a) 45° (b) 60° (c) 120° (d) 360° (e) −125°

(f) −950° (g) 26° 15\ (h) 60° 30\ 30\\

5) Find the degree measure of the angles whose measures are as follows:

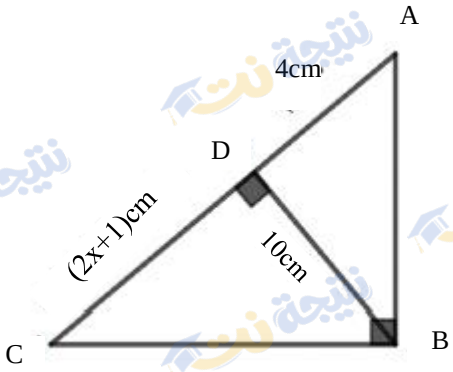
(a) 0.59 rad (b) 2.17 rad (c) 1.3 rad (d) -1.07 rad

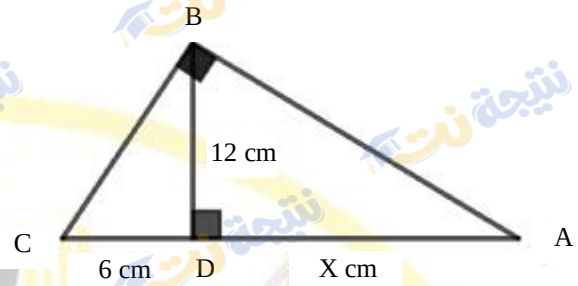
6) A central angle of 150° encloses an arc of length 10 cm.

Calculate the length of the radius of its circle to the nearest tenth.

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7) In each of the following figures, find the numerical values of x.





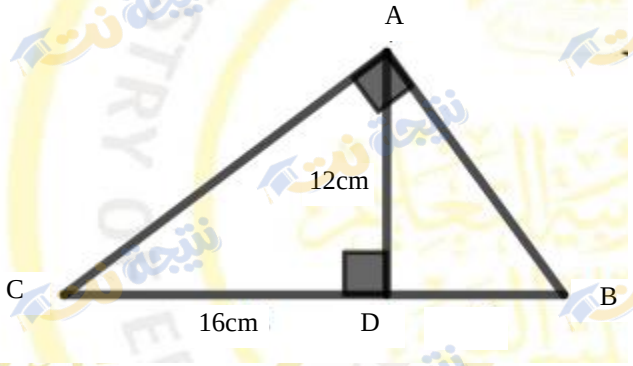
8) In the opposite figure:

ΔABC is a right triangle at A , $\overline{AD} \perp \overline{BC}$,

AD = 12 cm, DC= 16 cm

First: Write the triangles that are similar to ΔABC

Second: Find: The lengths of the following sides $\overline{AB}$, $\overline{AC}$, $\overline{DB}$



9) In the opposite figure:

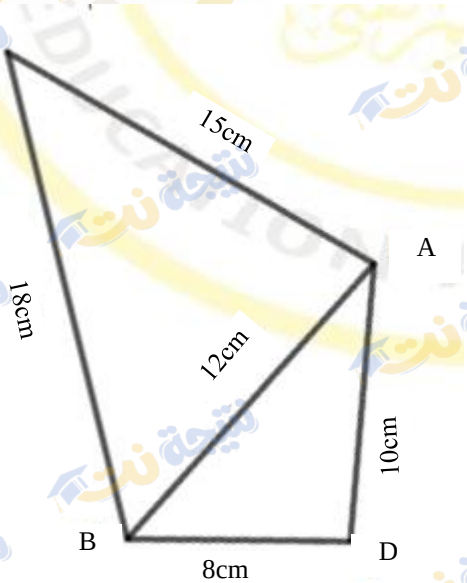
ADB is a triangle in which AB = 12cm,

AD = 10 cm, DB = 8 cm,

C is a point outside the triangle ADB such that AC = 15 cm, CB = 18 cm

First: Prove that: ΔABC ~ ΔDBA

Second: Prove that $\overrightarrow{BA}$ bisects ∠DBC



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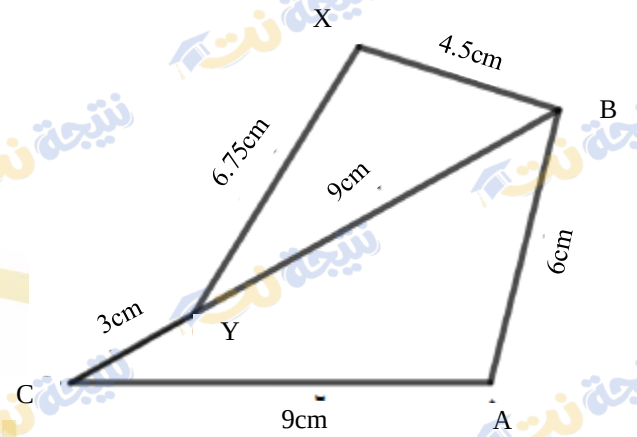
10) In the opposite figure:

Prove that:

First: ΔABC ~ ΔXBY

Second: $\overrightarrow{BC}$ bisects ∠ABX

(Such that: B , Y , C are colinear)



First secondary grade – Weekly evaluation- Third week

First group :

1) If x= 3 + 2 i , $y=\frac{4-2i}{1+i}$ *find* $x+y$ as a complex number

2) Find the quadrant in which the angle with a measure of 150° lies, then find two angles, one with a positive measure and the other with a negative measure, that share the terminal side.

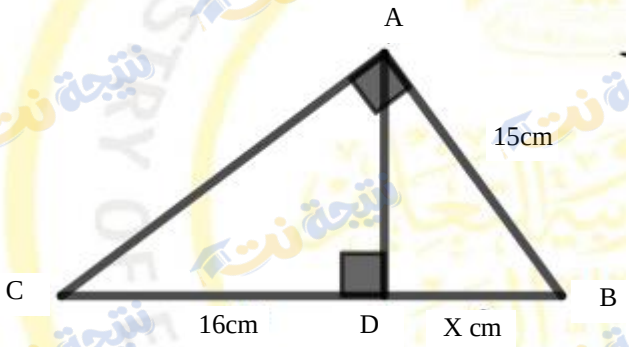
3) Find the radian measure and degree measure of the central angle subtended by an arc of length 14 cm in a circle of radius 10 cm.

4) In the opposite figure:

ΔABC is a right triangle at A , $\overline{AD} \perp \overline{BC}$

, AB = 15 cm, DC= 16 cm , DB = x cm

Find value of x (Remember 225 = 9×25)



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5) In the opposite figure:

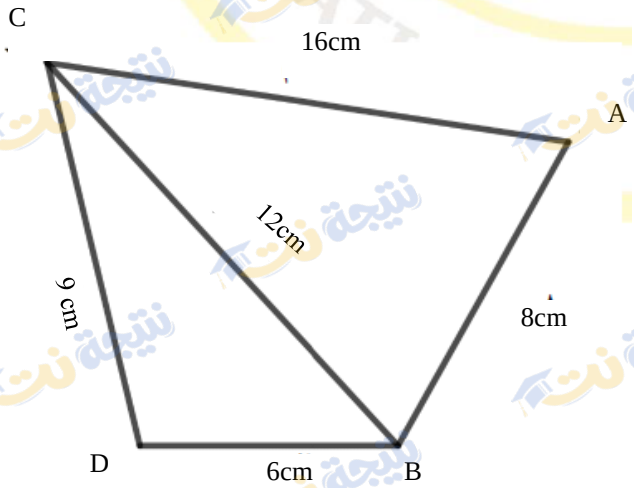
ABC is a triangle in which AB = 8 cm,

AC = 16 cm, CB = 12 cm,

D is a point outside the triangle ABC

such that DB = 6 cm, DC = 9 cm

Prove that: ΔABC ~ ΔBDC



Second group :

1) If x= 5 - 3 i , $y=\frac{5-i}{1-i}$ *find* $x+y$ as a complex number

2) Find the quadrant in which the angle with a measure of 210° lies, then find two angles, one with a positive measure and the other with a negative measure, that share the terminal side.

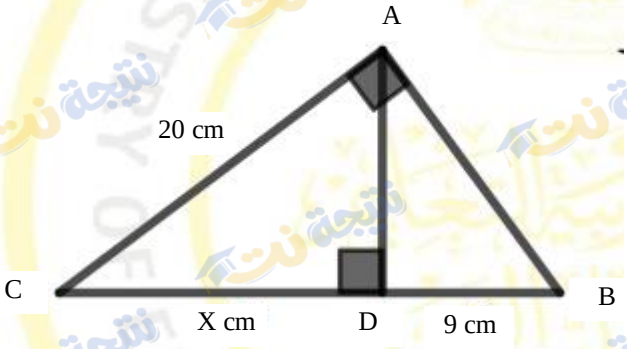
3) Find the radian measure and degree measure of the central angle subtended by an arc of length 16 cm in a circle of radius 10 cm.

4) In the opposite figure:

ΔABC is a right triangle at A , $\overline{AD} \perp \overline{BC}$

, AC = 20 cm, DB= 9 cm , DC = x cm

Find value of x (Remember 400 =16× 25)



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5) In the opposite figure:

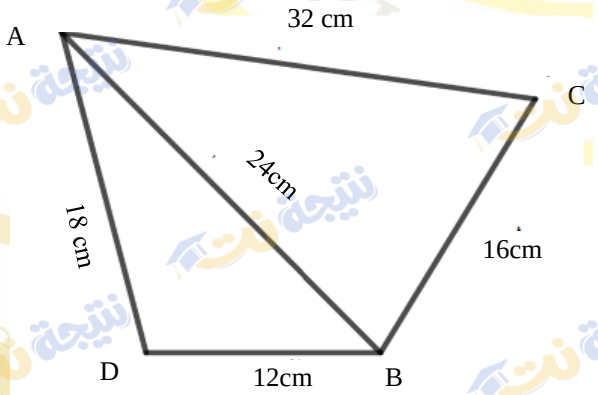
ABC is a triangle in which AB = 24 cm,

AC = 32 cm, BC = 16 cm,

D is a point outside the triangle ABC

such that DB = 12 cm, AD = 18 cm

Prove that: ΔABC ~ ΔADB



Third group :

1) If x= 7 - i , $y=\frac{7-3\,i}{1-i}$ *find* $x+y$ as a complex number

2) Find the quadrant in which the angle with a measure of 330° lies, then find two angles, one with a positive measure and the other with a negative measure, that share the terminal side.

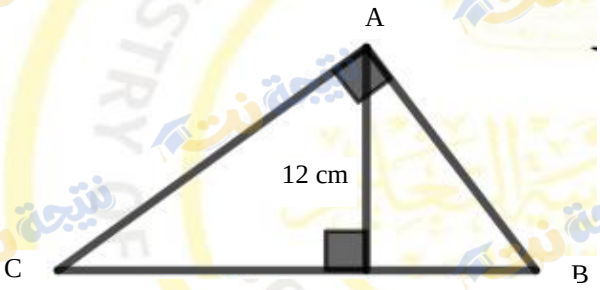
3) Find the radian measure and degree measure of the central angle subtended by an arc of length 15 cm in a circle of radius 10 cm.

4) In the opposite figure:

ΔABC is a right triangle at A , $\overline{AD} \perp \overline{BC}$

, AD = 12 cm, DB= x cm , DC = (25-x)cm

Find value of x (Remember 144 = 16×9)



5) In the opposite figure:

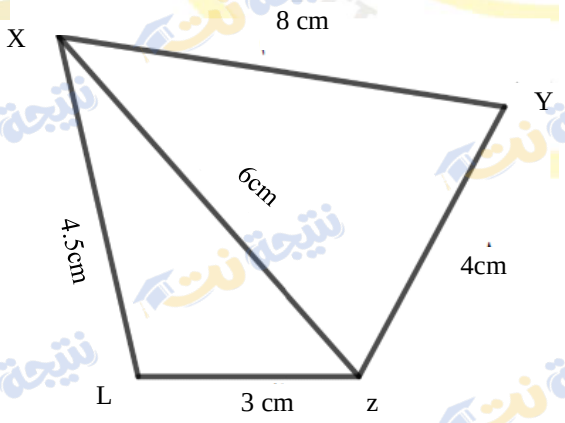
XYZ is a triangle in which XY = 8 cm,

YZ = 4 cm , XZ = 6 cm,

L is a point outside the triangle XYZ

such that LZ = 3 cm, LX = 4.5cm

Prove that: ΔXZY ~ ΔXLZ



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