

وزارة التربية والتعليم و التعليم الفنى

الإدارة المركزية للتعليم العام

إدارة تنمية مادة الرياضيات

برعاية معالي وزير التربية والتعليم و التعليم العام

السيد الأستاذ/ محمد عبد اللطيف

وتوجيهات رئيس الإدارة المركزية للتعليم العام

د/ هالة عبد السلام خفاجى

إشراف علمي

مستشار الرياضيات

أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات

للصف الأول الثانوي لغات

الفصل الدراسى الأول

للعام الدراسي ٢٠٢٦ / ٢٠٢٧

الأسبوع السابع

لجنة الإعداد

أ/ إيهاب فتحى أ/ عصام الجزار أ/ عبير نجاح أ/ عفاف جاد

ترجمة

أ/ محسب على

مراجعة

أ/ شريف البرهامى أ/ محمود درويش

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(1) Form the quadratic equation whose roots are $-4, 1$.

(2) Form the quadratic equation whose roots are $\frac{3}{5}, \frac{5}{3}$.

(3) Form the quadratic equation whose roots are $2+\sqrt{3}i,\ 2-\sqrt{3}i$

(4) Form the quadratic equation whose roots are

$$\frac{-2+2i}{1+i}, \quad \frac{-2-4i}{2-i}$$

(5) Find the value of:

tan 300°, sin 150°, cos 315°

sin 135°, csc 300°, tan 210°.

(6) If cos $\theta = -\frac{5}{13}$, 90°< θ <180°, find the value of each of the following:

(a) sin $(-\theta)$ (b) tan $(360° + \theta)$

(c) csc $(90° + \theta)$ (d) sec $(270° - \theta)$

(7) If the terminal side of the directed angle of measure θ intersects the unit circle at the point $(-\frac{4}{5}, \frac{-3}{5})$,

find:(a) sin $(180° + \theta)$ (b) sin $(\frac{\pi}{2} + \theta)$

(c) tan $(360° - \theta)$ (d) sin $(\frac{3\pi}{2} + \theta)$

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(8) The two polygons ABCD, XYZL are similar and the ratio between their areas is 4 : 9, XY = 15 cm, AB = (3k + 1)cm find the value of k.

(9) Two similar polygons, 9(area of first) = 16(area of second), if the perimeter of the first polygon is 45 cm, find the perimeter of the second polygon.

(10) Two similar polygons the ratio between their perimeters is 3 : 5, and the area of one of them decrease than the other by 64 cm^2, find the area of each of them.

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(1) Form the quadratic equation whose roots are 2, 3.

(2) Form the quadratic equation whose roots are $\frac{3}{2}, \frac{2}{3}$.

(3) Form the quadratic equation whose roots are $3+\sqrt{2}i, 3-\sqrt{2}i$

(4) Form the quadratic equation whose roots are $\frac{3}{i}$, $\frac{3+3i}{1-i}$

(5) Find the value of:
tan 135°, sin 120°, cos (−240°), cot 780°, csc 315°, tan 330°.

(6) Without using calculator find the value of the expression:
sin 600° cos (−30°) + sin 150° cos (−240°).

(7) If the directed angle of measure θ in the standard postion and its terminal side passes by the point $(\frac{3}{5}, \frac{4}{5})$
Find: First: sin (90° − θ), cot (90° − θ)
Second: tan (90° + θ) csc (90° + θ)
Third: tan (270° − θ), csc (270° − θ)
Fourth: sin (270° + θ) , sec (270° + θ)

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(8) The two polygons ABCD, XYZL are similar and the ratio between their areas is 9 : 16, XY = 12 cm, AB = (2k + 1)cm, find the value of k.

(9) Two similar polygons, 4(area of first) = 9(area of second) if the perimeter of the first polygon is 45 cm, find the perimeter of the second polygon.

(10) Two similar polygons the ratio between their perimeters is 4 : 7, and the area of one of them increase, than the other by 99 cm^2, find the area of each of them.

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First Group

(1) Form the quadratic equation whose roots are 5, −5.

(2) Form the quadratic equation whose roots are
$3 - 4i$, $3 - 4i^6$.

(3) If $\sin\theta = \cos 120^\circ \tan 225^\circ - \sin 750^\circ + \cos(-60^\circ)$,
find the values of θ , where $0^\circ < \theta < 360^\circ$

(4) If $\cos\theta = \frac{4}{5}$, $270^\circ < \theta < 360^\circ$, find the value of the expression:
$\sin(180^\circ - \theta) + \sin(270^\circ - \theta)$

(5) Two similar polygons the ratio between their perimeters is 2 : 3, if the area of the greater polygon is more than twice the area of the smallr polygon by 20 cm^2, find the area of each of them.

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Second Group

(1) Form the quadratic equation whose roots are Zero, 4.

(2) Form the quadratic equation whose roots are
$1 + i\ , 1 + i^3$

(3) If cos θ= cos 210° tan 135° + sin 150^0 + cos (−30°),
find the values of θ where $0° < \theta < 360°$

(4) If cos $\theta = \frac{5}{13}$, $270° < \theta < 360°$, find the value of the expression:
sin $(180° + \theta)$ + sin $(90° - \theta)$

(5) Two similar polygons the ratio between their perimeters is 5 : 3, if the area of the greater polygon is more than the area of the smallr polygon by 80 cm^2, find the area of each of them.

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Third Group

(1) Form the quadratic equation whose roots are 1, 5

(2) Form the quadratic equation whose roots are $1+4i$, $\frac{4+i}{i}$.

(3) If $\sin\theta = \cos 240^\circ \tan 135^\circ - \sin 150^0 + \cos(-60^\circ)$, find the values of θ where $0^\circ < \theta < 360^\circ$

(4) If $\cos\theta = \frac{9}{15}$, $270^\circ < \theta < 360^\circ$, find the value of the expression $\sin(180^\circ - \theta) - \cos(270^\circ + \theta)$

(5) Two similar polygons the ratio between their perimeters is 1 : 4, if the area of the greater polygon is equals qubic the area of the smallr polygon, find the area of each of them.

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