

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

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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 الثامن

لجنة الإعداد

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

ترجمة

أ/ محسب على

مراجعة

أ/ شريف البرهامى أ/ محمود درويش

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(1) If L, m are the two roots of the equation $x^2 - 5x + 6 = 0$, find the quadratic equation of roots L + 1, m + 1.

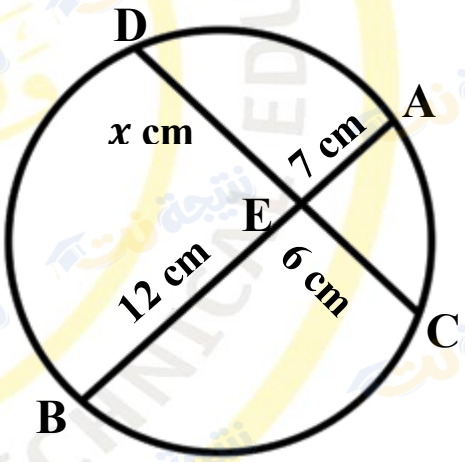
(2) If $\frac{2}{L}, \frac{2}{m}$ are the two roots of the equation $4x^2 + 3x - 2 = 0$, find the quadratic equation of roots L, m .

(3) If L, m are the two roots of the equation $x^2 - 7x + 3 = 0$, find the quadratic equation of roots L + m, Lm.

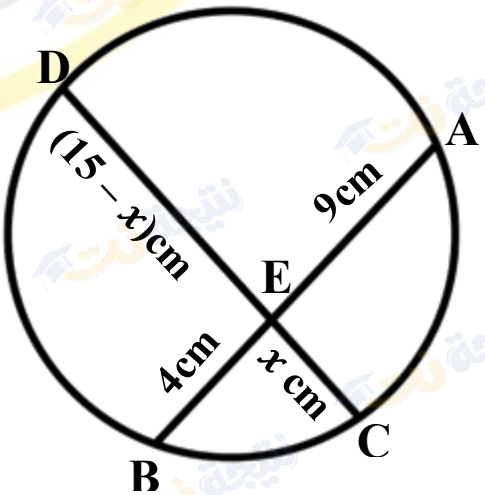
(4) Find the general soluation of the equation: $cos3\theta = sin\theta$.

(5) Find one of the values of θ $wher$ $0° < \theta < 90°$ which satisfies the equation $sin(3\theta + 15°) = cos(2\theta - 5°)$

(6) In the opposite figure:
$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$, $EA = 7cm$,
$EB = 12cm$, $EC = 6cm$,
$ED = x$ cm, find the value of x



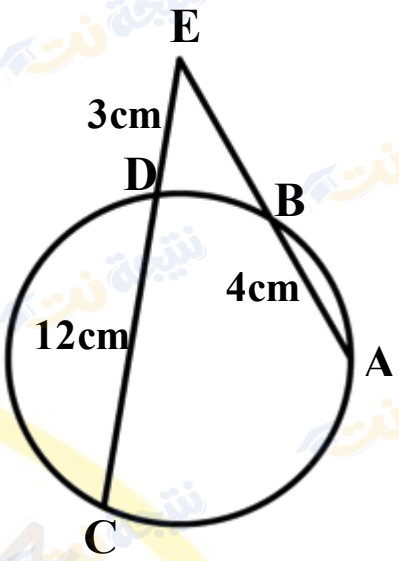
(7) In the opposite figure:
$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$, $EA = 9cm$,
$EC = x$ cm, $ED = (15 - x)cm$.
$EB = 4cm$, find the value of x.



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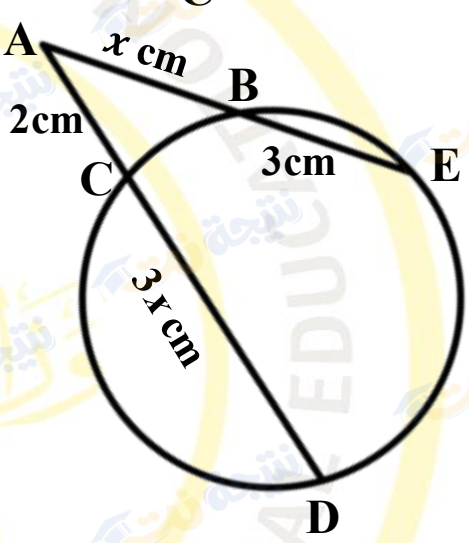
(8) **In the opposite figure:**

$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overrightarrow{AB} \cap \overrightarrow{CD} = \{E\}$, $AB = 4cm$
$ED = 3cm$, $CD = 12cm$
Find the length of $\overline{EB}$.



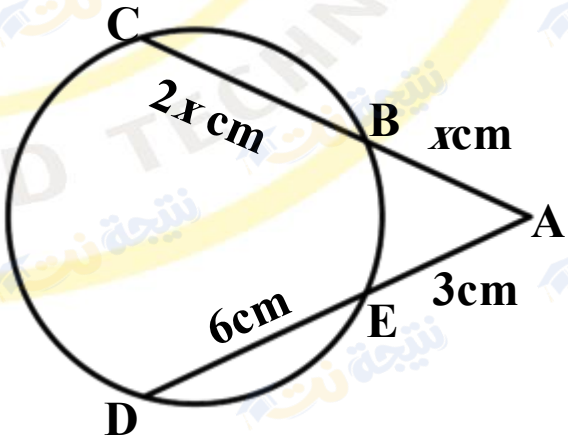
(9) **In the opposite figure:**

$\overline{EB}, \overline{CD}$ are two chords of a circle
$\overrightarrow{EB} \cap \overrightarrow{DC} = \{A\}$, $EB = 3cm$,
$AB = x$ cm, $AC = 2cm$.
$CD = (3x)cm$
find the value of x



(10) **In the opposite figure:**

$\overline{EB}, \overline{CD}$ are two chords
of a circle $\overrightarrow{EB} \cap \overrightarrow{DC} = \{A\}$,
$AE = 3cm$, $AB = xcm$
$BC = 2xcm$, $DE = 6cm$
find the value of x



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(1) If L, m are the two roots of the equation $x^2 - 7x + 3 = 0$
find the value of:

a) $L^2 + m^2$ b) $\frac{2}{L} + \frac{2}{m}$ c) $\frac{L}{m} + \frac{m}{L}$ d) $L^2m + Lm^2$

(2) If L, m are the two roots of the equation $x^2 + 3x - 5 = 0$
form the quadratic equation of roots $L^2,\ m^2$

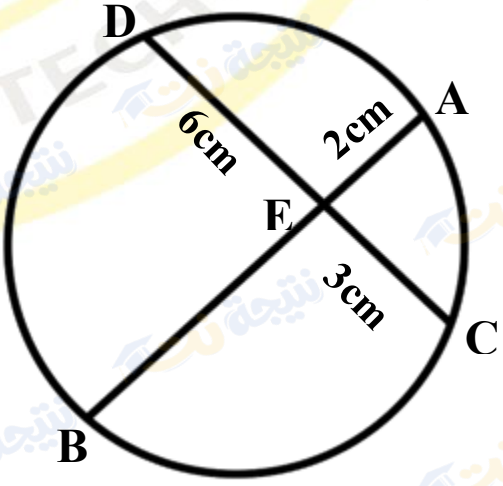
(3) Find the quadratic equation whose roots are duble the roots of the equation: $2x^2 - 8x + 5 = 0$

(4) Find the general soluation of the equation: $\sin 4\theta = \cos 2\theta$.

(5) Find the general soluation of the equation: $cos5\theta = sin\theta$.

(6) Find one of the values of θ $wher$ $0° < \theta < 90°$ which satisfies the equation: $tan(\theta + 20°) = cot(3\theta + 30°)$.

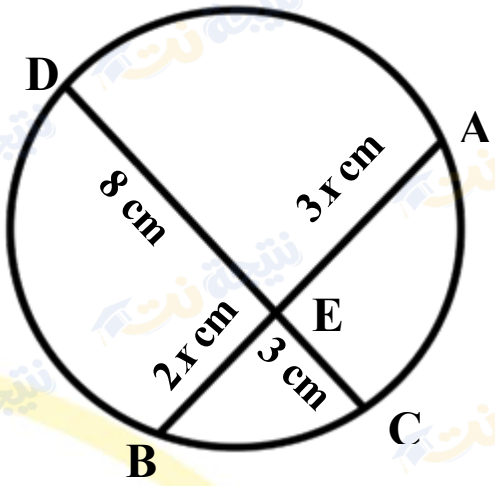
(7) In the opposite figure:
$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$, $EA = 2cm$,
$EC = 3cm, ED = 6cm$.
find the length of $\overline{EB}$.



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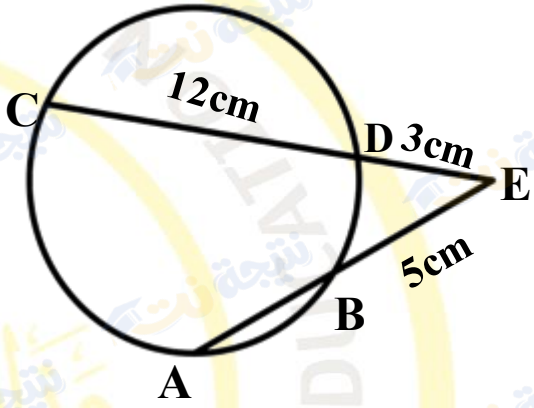
(8) In the opposite figure:

$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$, $EA = (3x)cm$,
$EB = (2x)cm$, $EC = 3cm$,
$ED = 8cm$. Find x



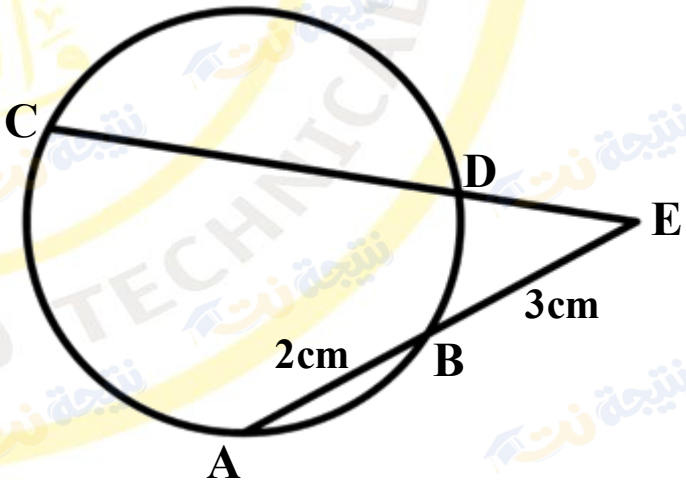
(9) In the opposite figure:

$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overrightarrow{AB} \cap \overrightarrow{CD} = \{E\}$, $EB = 5cm$,
$DC = 12cm$, $ED = 3cm$.
find the length of $\overline{AB}$.



(10) In the opposite figure:

A circle in which
$\overrightarrow{AB} \cap \overrightarrow{CD} = \{E\}$, $EB = 3cm$,
$EC = 7.5cm$, $AB = 2cm$.
find the length of $\overline{CD}$.



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First group

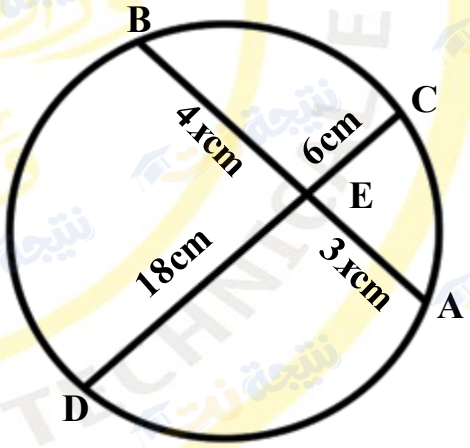
(1) If L, m are the two roots of the equation $2x^2 - 4x + 5 = 0$
form the quadratic equation of roots $5L^2,\ 5m^2$

(2) If L, m are the two roots of the equation $x^2 - 5x + 3 = 0$
find the value of: $(L - m)^2$

(3) Find the general soluation of the equation: $sin5\theta = cos\theta$.

(4) If $tan3\theta = cot2\theta$, where θ is the measure of an acute positive angle.
Find θ.

(5) In the opposite figure:
$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$,
$EA = (3x)cm$,
$EC = 6cm, ED = 18cm$
$EB = (4x)cm$,
find the value of x



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Second group

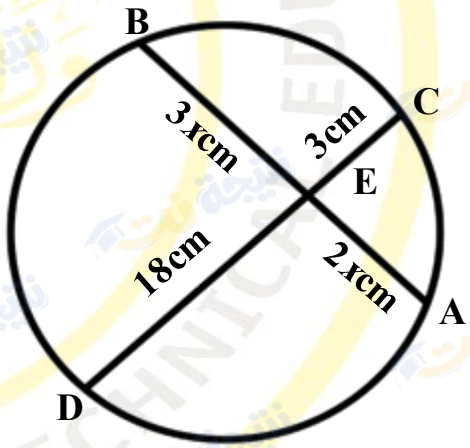
(1) If L, m are the two roots of the equation $2x^2 - 6x + 3 = 0$
form the quadratic equation of roots $4L^2,\ 4m^2$

(2) If L, m are the two roots of the equation $x^2 - 6x + 5 = 0$
find the value of: $(L - m)^2$

(3) Find the general soluation of the equation: $sin7\theta = cos2\theta$.

(4) If $tan5\theta = cot\theta$, where θ is the measure of an acute positive angle.
Find θ.

(5) In the opposite figure:
$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$,
$EA = (2x)cm$,
$EC = 3cm, ED = 18cm$
$EB = (3x)cm$,
find the value of x



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Third group

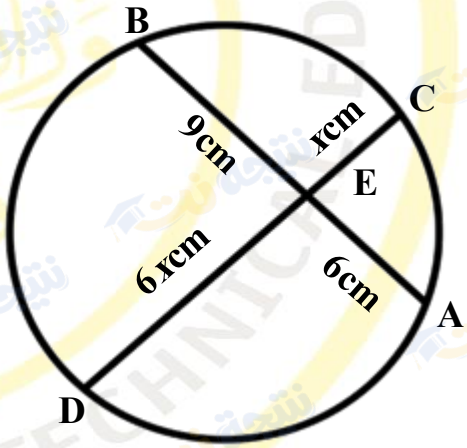
(1) If L, m are the two roots of the equation $2x^2 - 8x + 3 = 0$
form the quadratic equation of roots $2L^2,\ 2m^2$

(2) If L, m are the two roots of the equation $x^2 - 8x + 3 = 0$
find the value of: $(L - m)^2$

(3) Find the general soluation of the equation: $sin6\theta = cos3\theta$.

(4) If $tan3\theta = cot\theta$, where θ is the measure of an acute positive angle.
Find θ.

(5) In the opposite figure:
$\overline{AB}, \overline{CD}$ are two chords of a circle
$\overline{AB} \cap \overline{CD} = \{E\}$,
$EA = 6cm$,
$EC = x\ cm, ED = (6x)cm$
$EB = 9\ cm$,
find the value of x



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