



وزارة التربية والتعليم و التعليم الفني
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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مستشار الرياضيات
أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات

للفصل الأول الثانوي **لغات**
الفصل الدراسي الأول
للعام الدراسي 2025 / 2026

الأسبوع الأول

إعداد

أ/ عصام الجزار

أ/ إيهاب فتحى

ترجمة

أ/ محمد على

مراجعة الترجمة

أ/ شريف البرهامي

الصف الأول الثانوي – الرياضيات لغات – الأداء الصفى – الأسبوع الأول

1- Find each of the following in its simplest form:

(a) i^{101} (b) i^{-32} (c) i^{4n+17} (d) i^{2026}

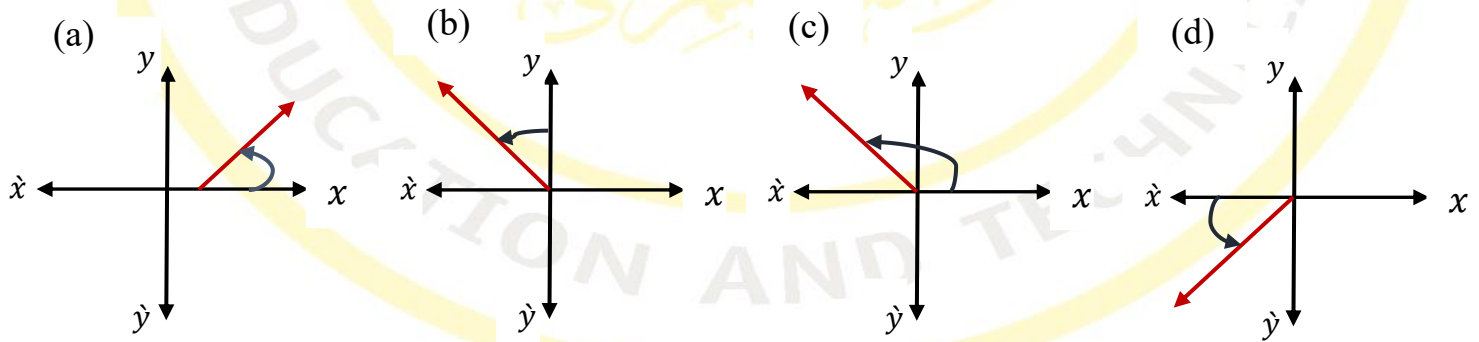
2- Find in $\mathbb{R}$ the solution set of the equation: $x^2 + 16 = 0$

3- Find in $\mathbb{C}$ the solution set of the equation: ① $4x^2 + 36 = 0$

② $\frac{1}{4}x^2 + 64 = 0$

4- Find the values of x, y: $(3x + 1) + 4yi = 7 - 20i$

5- Which of the following angles is in the standard position and explain your answer?

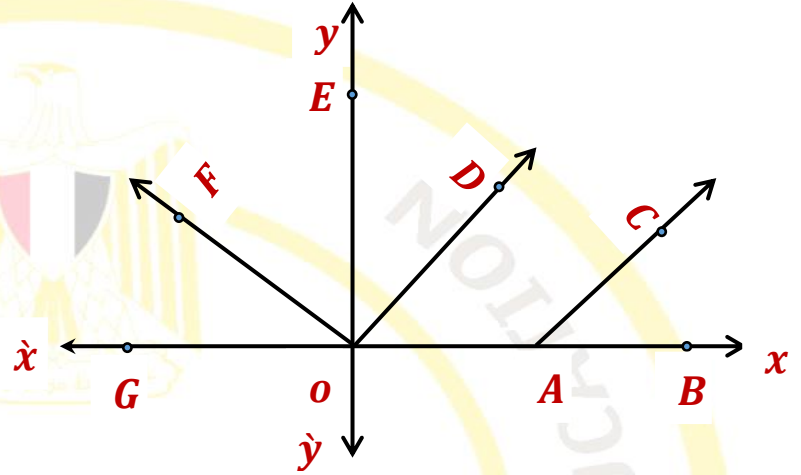




6- In the opposite figure:

Which of the following directed angles is in its standard position? Explain your answer.

- (a) $(\overrightarrow{OA}, \overrightarrow{OD})$
- (b) $(\overrightarrow{OF}, \overrightarrow{OD})$
- (c) $(\overrightarrow{AB}, \overrightarrow{AC})$
- (d) $(\overrightarrow{OE}, \overrightarrow{OD})$
- (e) $(\overrightarrow{OD}, \overrightarrow{OF})$
- (f) $(\overrightarrow{OB}, \overrightarrow{OF})$



7- Write the following angles using ordered pairs:

- (a) $(\angle AOB)$
- (b) $(\angle ABC)$

8- Draw a directed angle in standard position with measure 70°

9- If the polygon $ABCD \sim$ the polygon $XYZL$

- (a) Write the corresponding sides
- (b) Write the corresponding angles

10- If the polygon $ABCD \sim$ the polygon $XYZL$, $AB = 6 \text{ cm.}$,
 $BC = 8 \text{ cm.}$ $XY = k + 2$, $YZ = 12 \text{ cm.}$ find the value of k



- 11- If $\Delta ABC \sim \Delta DEX$, the perimeter of $\Delta ABC = 24 \text{ cm.}$,
 $DE = 20 \text{ cm.}$ $EX = 15 \text{ cm.}$ $XD = 13 \text{ cm.}$
 find the length of the sides of ΔABC
- 12- Two similar polygons, the ratio between the lengths of two corresponding sides is 2: 3, the perimeter of the bigger equals 35 cm., then the perimeter of the smaller polygon.
- 13- Two similar rectangles, the dimensions of the first are 8 cm., 12 cm. and the perimeter of the second rectangle = 60 cm. find the lengths of two dimensions of the second rectangle

- 14- In the opposite figure:

the polygon $ABCD \sim$ the polygon $LXYZ$

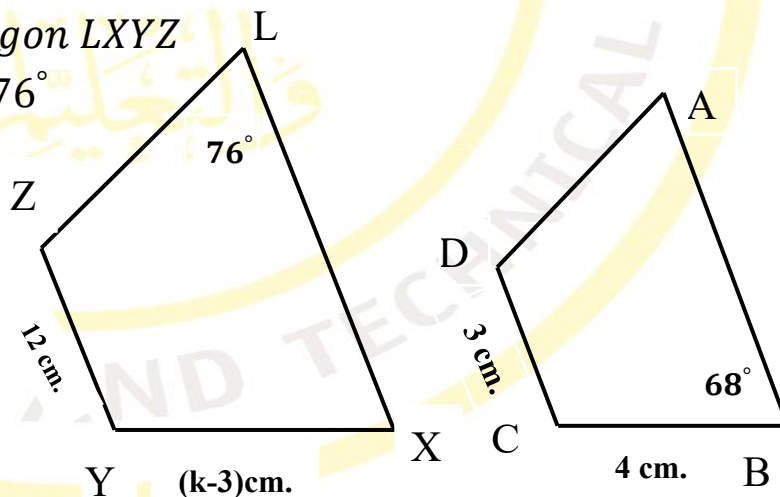
$$m(\angle B) = 68^\circ, m(\angle L) = 76^\circ$$

$$BC = 4 \text{ cm.}, CD = 3 \text{ cm.}$$

$$XY = k - 3, YZ = 12 \text{ cm.}$$

Find (a) $m(\angle A)$, $m(\angle X)$

(b) the value of K



- 15- If the polygon $ABCD \sim$ the polygon $XYZL$, $AB = 4 \text{ cm.}$,
 $BC = 10 \text{ cm.}$ $XY = k$, $YZ = 2k + 3 \text{ cm.}$ find the value of k

الصف الأول الثانوي – الرياضيات لغات – الأداء المنزلي – الأسبوع الأول

1- Find each of the following in its simplest form:

(b) i^{2008} (b) i^{-21} (c) i^{4n+19} (d) i^{37}

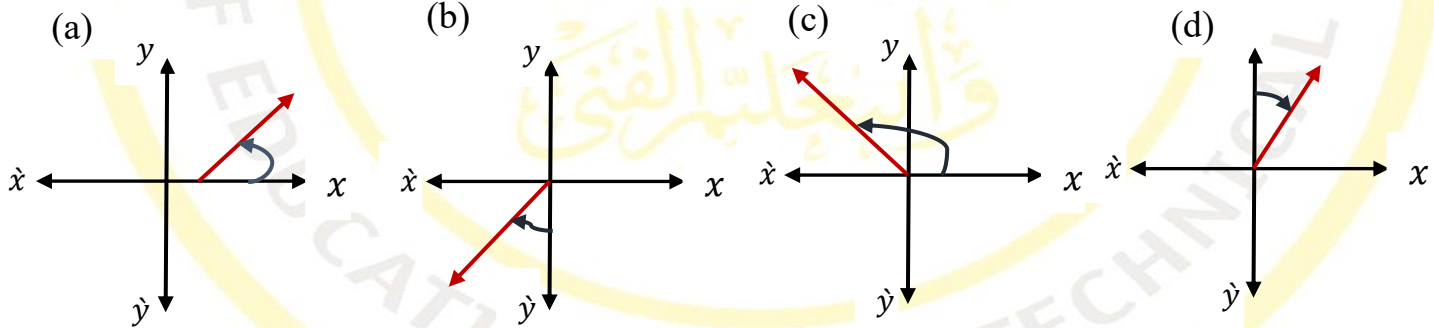
2- Find in $\mathbb{R}$ the solution set of the equation: $5x^2 + 100 = 0$

3- Find in $\mathbb{C}$ the solution set of the equation: ① $2x^2 + 72 = 0$

② $\frac{2}{5}y^2 + 10 = 0$

4- Find the values of x, y : $(3x + 2) + 4yi = 5 - 16i$

5- Which of the following angles is in the standard position and explain your answer?

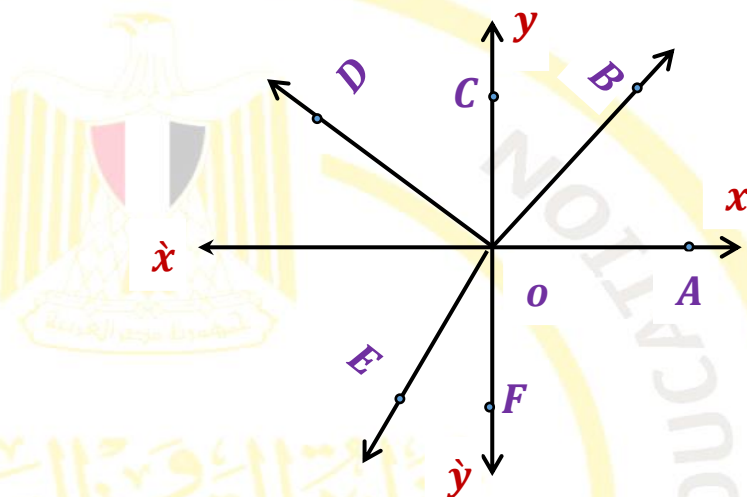




6- In the opposite figure:

Which of the following directed angles is in its standard position? Explain your answer.

- (a) $(\overrightarrow{OA}, \overrightarrow{OD})$
- (b) $(\overrightarrow{OF}, \overrightarrow{OE})$
- (c) $(\overrightarrow{OE}, \overrightarrow{OF})$
- (d) $(\overrightarrow{OA}, \overrightarrow{OE})$
- (e) $(\overrightarrow{OC}, \overrightarrow{OD})$
- (f) $(\overrightarrow{OB}, \overrightarrow{OD})$



7- Write the following angles using ordered pairs:

- (a) $(\angle XYL)$
- (b) $(\angle ZED)$

8- Draw a directed angle in standard position with measure 120°

9- If the polygon $LYNZ \sim$ the polygon $ABCD$

- (a) Write the corresponding sides
- (b) Write the corresponding angles

10- If the polygon $ABCD \sim$ the polygon $XYZL$

, $AB = 54 \text{ cm.}$, $BC = 30 \text{ cm.}$ $XY = (2m - 1)$,
 $YZ = (m + 1) \text{ cm.}$ find the value of m



- 11- If $\Delta ABC \sim \Delta DEX$, the perimeter of $\Delta DEX = 60$ cm. ,
 $AB = 14$ cm. $BC = CA = 8$ cm.
Find the length of the sides of ΔDEX
- 12- Two similar polygons, the ratio between the lengths of two corresponding sides is $4 : 5$, the perimeter of the bigger equals 35 cm.,
then the perimeter of the smaller polygon.
- 13- Two similar rectangles, the dimensions of the first are 6 cm., 10 cm. and the
perimeter of the second rectangle = 40 cm. find the lengths of two dimensions of
the second rectangle

- 14- In the opposite figure:

the polygon $ABCD \sim$ the polygon $LXYZ$

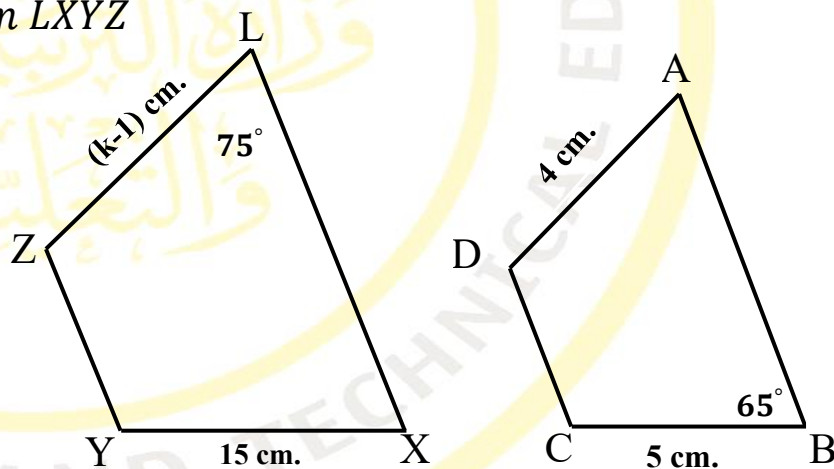
$$m(\angle B) = 68^\circ, m(\angle L) = 75^\circ$$

$$BC = 4 \text{ cm.}, CD = 3 \text{ cm.}$$

$$XY = k - 3, YZ = 12 \text{ cm.}$$

Find (a) $m(\angle A)$, $m(\angle X)$

(b) the value of k



- 15- If the polygon $ABCD \sim$ the polygon $XYZL$, if the ratio between
their perimeters equals $3 : 1$ respectively $XY = k$ cm ,
 $AB = (2k + 3)$ cm. find the value of k