



ALADWANA

Gem

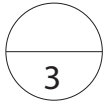


Mathematics

الصف 6 الابتدائي

إجابات نماذج اختبارات الأضواء لشهر أبريل

الفصل الدراسي الثاني 2024 - 2025م



## 1 Choose the correct answer:

- a  $28\% + 31\% = \dots\dots\dots$  . ( 59 , 0.59 , 100% , 3% )
- b If Ali bought 9 kg of oranges for 36L.E., then the price of each kg =  $\dots\dots\dots$  L.E. ( 36 , 9 , 4 , 3 )
- c The point ( 0 , 7 ) lies in/on  $\dots\dots\dots$  . ( Y-axis , X-axis , 3<sup>rd</sup> quadrant , 4<sup>th</sup> quadrant )



## 2 Answer each of the following:

- a Ali has 100 L.E. He spent  $\frac{3}{4}$  of what he has, what is the percentage of the money he spent?

**Answer:**

$$\text{Ali spent} = 100 \times \frac{3}{4} = 75 \text{ L.E.}$$

$$\text{The percentage of money he spent} = 75 \div 100 = 75\%$$

- b Salem bought a car for 420,000 L.E. He paid 40% of its price.

How much money did he pay?

**Answer:**

$$\text{Whole price} = 420,000 \quad \text{percent} = 40\% \quad \text{Part} = ??$$

$$\text{Part} = \text{Whole} \times \text{Percent}$$

$$\text{Then Salem paid} = 420,000 \times 40\% = 168,000 \text{ L.E.}$$

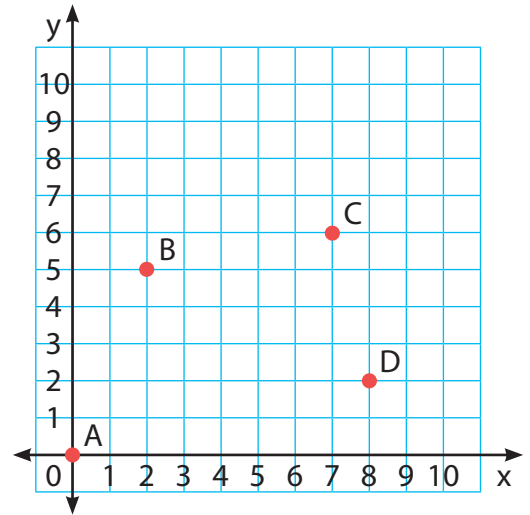
- c Find the distance between the point C ( 4 , -3 ) and point D ( 4 , 2 ) on the coordinate plane.

**Answer:**

$$\text{The distance between the points C and D} = | -3 | + | 2 | = 5 \text{ units}$$

d Use the opposite figure to write the coordinate of each point of the following:

- ▶ A (0, 0)
- ▶ B (2, 5)
- ▶ C (7, 6)
- ▶ D (8, 2)



e Write the coordinates of the image of the following points by reflection across X-axis:

- 1 A (2, -3)
- 2 B (0, 7)
- 3 C (-1, 2)

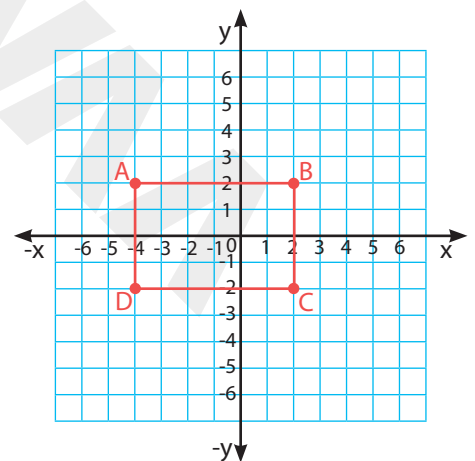
Answer:

- 1 Image of A by reflection across X-axis is (2, 3)
- 2 Image of B by reflection across X-axis is (0, -7)
- 3 Image of C by reflection across X-axis is (-1, -2)

f Plot the points A (-4, 2), B (2, 2), C (2, -2) and D (-4, -2) on the coordinate plane, state the name of the figure ABCD produced from joining these points.

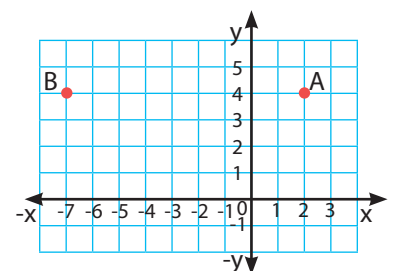
Answer:

- ▶ The figure ABCD is a rectangle.



g From the opposite coordinate plane, complete:

- ▶ The coordinate of point A (2, 4).
- ▶ The coordinate of point B (-7, 4).
- ▶ The length of  $\overline{AB}$  is 9 units.



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## 1 Choose the correct answer:

- a Which point is a reflection of  $(1, 8)$  across the y-axis on a coordinate plane?

$[(1, -8), (-1, -8), (8, -1), (-1, 8)]$

- b  $1 - 25\% = \dots\dots\dots$  (25%, 75, 0.75, 85%)

- c 30% of 120 =  $\dots\dots\dots$  (45, 35, 36, 46)

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## 2 Answer each of the following:

- a Adham bought a TV set, its original price is 23,500 L.E. The sales tax on the TV set is 12%. What is the price of the TV set after adding the tax?

**Answer:**

$$\text{The tax} = 12\% \times 23,500 = 2,820 \text{ L.E.}$$

$$\text{The price after adding the tax} = 23,500 + 2,820 = 26,320 \text{ L.E.}$$

- b A fruiterer sold 20% of the amount of fruits he has. If he sold 20 kgs of fruits. How many kgs of fruits does the fruiterer have before selling?

**Answer:**

$$\text{Whole} = ??, \quad \text{Percent} = 20\%, \quad \text{Part} = 20 \text{ kg}$$

$$\text{Whole} = 20 \div 20\% = 100 \text{ kg}$$

$$\text{The original amount of fruit} = 100 \text{ kg}$$

- c Find the distance between the point  $C(-2, -3)$  and point  $D(-2, -9)$ .

**Answer:**

$$\text{The distance between the points C and D} = |-9| - |-3| = 6 \text{ units}$$

- d Write the coordinates of the image of each point of the following by reflection across Y-axis:

1 A  $(7, -2)$

2 B  $(-1, 4)$

3 C  $(-10, -2)$

**Answer:**

1 Image of A by reflection across Y-axis is  $(-7, -2)$

2 Image of B by reflection across Y-axis is  $(1, 4)$

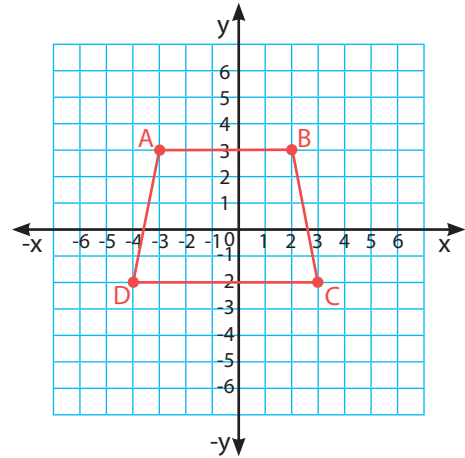
3 Image of C by reflection across Y-axis is  $(10, -2)$

- e Plot and join the points in the given order, then complete the figure by joining the end points, and identify the figure.

$A(-3, 3)$  ,  $B(2, 3)$  ,  $C(3, -2)$  ,  $D(-4, -2)$

**Answer:**

- ▶ The figure ABCD is a trapezium.



- f If the point  $(4, -3)$  is reflected across the X-axis, find the distance between the point and its reflection.

**Answer:**

- ▶ The image of the point  $(4, -3)$  by reflection across the X-axis is  $(4, 3)$   
▶ The distance between the point and its reflection =  $|-3| + |3| = 6$  units

- g Write the position of each of the following points in the coordinate plane:

▶  $A(-2, 2)$                       ▶  $B(3, -2)$                       ▶  $C(1, 7)$                       ▶  $D(0, 5)$

**Answer:**

- ▶  $A(-2, 2)$  lies in the 2<sup>nd</sup> quadrant.                      ▶  $B(3, -2)$  lies in the 4<sup>th</sup> quadrant.  
▶  $C(1, 7)$  lies in the 1<sup>st</sup> quadrant.                      ▶  $D(0, 5)$  lies on the Y-axis.

3

## 1 Choose the correct answer:

- a If the percentage of success in a school is 81%, then the percentage of failure is ..... %  
(81 , 20 , 19 , 40)

- b From the opposite table, the value of the unknown = .....

Whole	Part	Percent
Unknown	38	40%

(48 , 45 , 38 , 95)

- c A point both of its coordinates are negative lies in ..... quadrant.

(1<sup>st</sup> , 2<sup>nd</sup> , 3<sup>rd</sup> , 4<sup>th</sup>)

## 2 Answer each of the following:

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- a Amal has 120 L.E. She spent  $\frac{2}{3}$  of what she has.

What is the percentage of money she spent?

**Answer:**

$$\text{The money Amal spent} = 120 \times \frac{2}{3} = 80 \text{ L.E.}$$

$$\text{The percentage of money she spent} = (80 \div 100) \times 100\% = 80\%$$

- b Islam went to a restaurant. The subtotal of the bill was 410 L.E. A 8% service charge and 5% taxes charge are added to the bill. Calculate the total sum of the bill.

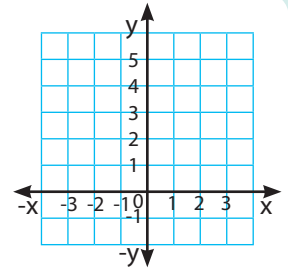
**Answer:**

$$\text{The value of the service} = 8\% \times 410 = 32.8 \text{ L.E.}$$

$$\text{The value of the tax} = 5\% \times 410 = 20.5 \text{ L.E.}$$

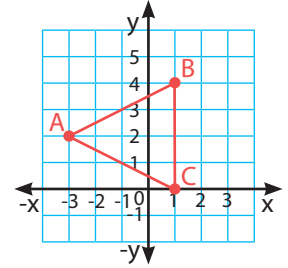
$$\text{The total sum of the bill} = 410 + 32.8 + 20.5 = 463.3 \text{ L.E.}$$

- c Plot the points A  $(-3, 2)$ , B  $(1, 4)$ , and C  $(1, 0)$  on the opposite coordinate plane, then determine the type of the resulted triangle according to its angles measures.



**Answer:**

- ▶ The resulted triangle is an acute-angled triangle.



- d Write the position of each of the following points in the coordinate plane:

- ▶ A  $(-5, 7)$       ▶ B  $(6, -3)$       ▶ C  $(5, 3)$       ▶ D  $(4, 0)$

**Answer:**

- ▶ A  $(-5, 7)$  lies in the 2<sup>nd</sup> quadrant.      ▶ B  $(6, -3)$  lies in the 4<sup>th</sup> quadrant.  
▶ C  $(5, 3)$  lies in the 1<sup>st</sup> quadrant.      ▶ D  $(4, 0)$  lies on the X-axis.

- e Write the image of the following points by reflection across the X-axis:

- ▶ A  $(-1, 3)$       ▶ B  $(0, 9)$       ▶ C  $(3, 0)$

**Answer:**

- ▶  $\hat{A}(-1, -3)$       ▶  $\hat{B}(0, -9)$       ▶  $\hat{C}(3, 0)$

- f Find the distance between each pair of points in the following:

1  $(-2, 4)$  and  $(-2, -1)$

2  $(3, -1)$  and  $(7, -1)$

**Answer:**

1 The distance between  $(-2, 4)$  and  $(-2, -1) = |4| + |-1| = 4 + 1 = 5$  units

2 The distance between  $(3, -1)$  and  $(7, -1) = |7| - |3| = 7 - 3 = 4$  units

- g Complete: If the point at the position  $(-2, 3)$  has moved 2 units to the right and 3 units upwards, then its new position is  $(0, 6)$ .

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1 Choose the correct answer:

a 20% of 120 km = ..... km. (20 , 24 , 26 , 28)

b From the opposite table, the value of the unknown = .....

Whole	Part	Percent
420	Unknown	40%

(168 , 200 , 40% , 420)

c The point (0 , -2) lies in/on ..... . (Y-axis , X-axis , 3<sup>rd</sup> quadrant , 4<sup>th</sup> quadrant)

7

2 Answer each of the following:

a A car price is 350,000 L.E.The owner gives a 15% discount on it. Calculate the selling price of the car after the discount.

**Answer:**

The value of discount =  $350,000 \times 15\% = 52,500$  L.E.

The price of the car after the discount =  $350,000 - 52,500 = 297,500$  L.E.

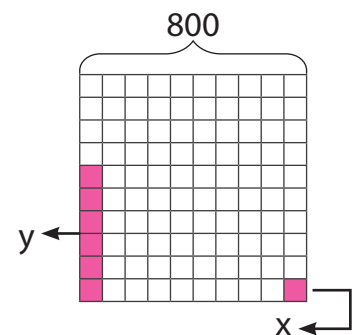
b Salem has 120 pens in his bag. If 20% of them are red, then find the number of red pens in his bag.

**Answer:**

The number of red pens in the bag =  $120 \times 20\% = 24$  red pens

c Complete:

From the following  $10 \times 10$  grid:  $x + y = 56$



- d A piece of cloth of 30 meters long, was put in water, it shrank by 3%. What is its length after shrinking?

**Answer:**

The cloth shrank by =  $30 \times 3\% = 0.9$  meters

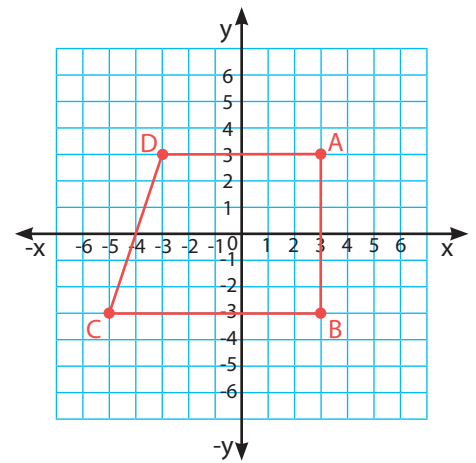
The length after shrinking =  $30 - 0.9 = 29.1$  meters

- e Plot and join the points in the given order, then complete the figure by joining the end points, and identify the shape.

A (3, 3) , B (3, -3) , C (-5, -3) , D (-3, 3)

**Answer:**

► The shape is a trapezium.



- f Find the distance between the point C (5, -2) and point D (5, 6).

**Answer:**

The distance between the points C and D =  $|-2| + |6| = 8$  units

- g Write the position of each of the following points in the coordinate plane:

1 A (0, 2)

2 B (1, -3)

**Answer:**

1 A (0, 2): lies on Y-axis.

2 B (1, -3): lies in 4<sup>th</sup> quadrant.

## 1 Choose the correct answer:

3

- a  $33\% + 42\% = \dots\dots\dots$  . (59 , 0.75 , 100% , 3%)
- b Which point is a reflection of  $(7, -2)$  across the Y-axis on the coordinate plane?  
 $[(7, 2), (-7, 2), (7, -2), (-7, -2)]$
- c From the opposite table, the value of the unknown =  $\dots\dots\dots$  .

Whole	Part	Percent
Unknown	60	30%

( 100 , 120 , 180 , 200 )

## 2 Answer each of the following:

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- a Younis bought a TV set for 45,000 pounds, he paid 25% of its price.

How much money did he pay?

**Answer:**

$$\text{Younis paid} = 45,000 \times 25\% = 11,250 \text{ pounds}$$

- b The price of a car is 600,000 L.E. and the sales tax on the car is 12%. What is the price of the car after adding the tax?

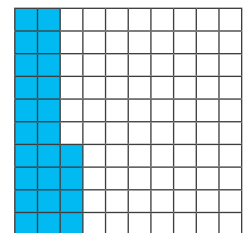
**Answer:**

$$\text{The value of the tax} = 600,000 \times 12\% = 72,000 \text{ pounds}$$

$$\text{The price of the car after adding the tax} = 600,000 + 72,000 = 672,000 \text{ pounds}$$

- c Using the given model:

Find 24% of the number 82

**Answer:**

$$\text{Each part of the model represents} = 82 \div 100 = 0.82$$

$$\text{Then } 24\% \text{ of } 82 = 24 \times 0.82 = 19.68$$

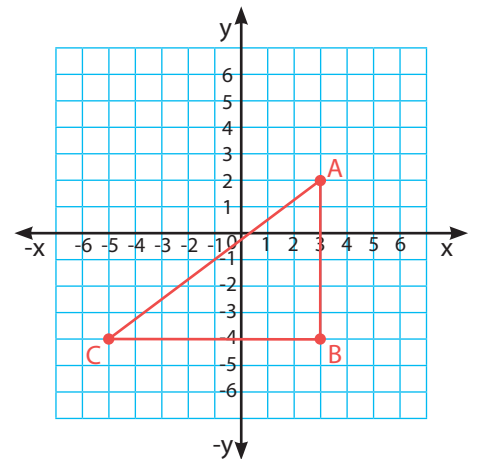
**d Complete:**

Alia plotted a point on the coordinate plane 4 units to the right of the origin point and 2 units up, then the ordered pair representing the point is  $(4, 2)$ .

- e** Graph the points  $A(3, 2)$ ,  $B(3, -4)$  and  $C(-5, -4)$ , join them to draw the triangle ABC and find the images of each point by reflection across the X-axis.

**Answer:**

- ▶ The image of point  $A(3, 2)$  by reflection across X-axis is  $(3, -2)$ .
- ▶ The image of point  $B(3, -4)$  by reflection across X-axis is  $(3, 4)$ .
- ▶ The image of point  $C(-5, -4)$  by reflection across X-axis is  $(-5, 4)$ .



- f** Mention the position of each point of the following in the coordinate plane:

**1**  $A(8, 0)$

**2**  $B(-1, 3)$

**Answer:**

- 1**  $A(8, 0)$ : lies on X-axis.
- 2**  $B(-1, 3)$ : lies in 2<sup>nd</sup> quadrant.

- g** Find the distance between each pair of the points of the following:

**1**  $(3, 4)$  and  $(-3, 4)$

**2**  $(0, 4)$  and  $(0, 1)$

**Answer:**

- 1** The distance between  $(3, 4)$  and  $(-3, 4) = |3| + |-3| = 3 + 3 = 6$  units
- 2** The distance between  $(0, 4)$  and  $(0, 1) = |4| - |1| = 4 - 1 = 3$  units