

MATHEMATICS

نماذج اختبارات الأضواء

لشهر أكتوبر

الصف
1
الإعدادي
الفصل الدراسي الأول



1- Choose the correct answer:

2

- a If $\frac{2}{3} = \frac{12}{c}$, then the value of $c - 2 = \dots\dots\dots$ (18 , 16 , 14 , 7)
- b A meal costs 150 L.E., and 18% of the cost is added as the meal's profit.
 , then the meal's price = $\dots\dots\dots$ L.E. (170 , 177 , 150 , 98)

2- Answer each of the following:

8

- a If $b = 7$, and $c = -1$, then find the value of the expression: $2b^2 - 3b \div -(c)$

- b A plumber has a pipe $64 \frac{5}{8}$ dm long. He first cuts off a part $2 \frac{7}{8}$ dm from the end of the pipe, and then he cuts off another $1 \frac{3}{8}$ dm.

How long is the remaining part of the pipe?

.....

- c Add the expression: $7y - 3x - 6z$ to the expression: $z - 2y - 5x$.

.....

- d Find in \mathbb{Q} the solution set of the equation: $2(2x - 5) - 2 = x$

.....

1- Choose the correct answer:

2

a Which of the following sums has a positive sign?

($19 + (-26)$, $-35 + 17$, $-25 + (-12)$, $40 + (-18)$)

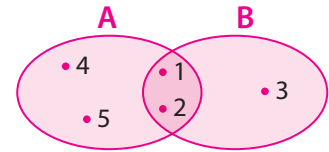
b $\frac{5}{25} = \dots\dots\dots\%$

(35 , 20 , 45 , 50)

2- Answer each of the following:

8

a From the opposite Venn diagram,



• $A \cup B = \dots\dots\dots$

• $A \cap B = \dots\dots\dots$

b A car uses 5 liters of petrol to cover a distance of 60 km, how much petrol would the car need to cover the distance of 180 km if it travels at the same rate?

.....

.....

.....

.....

c A square of $1\frac{3}{4}$ cm side length, find its perimeter.

.....

.....

d If $a = -3$ and $b = 7$, then find the value of the expression: $2a^2 - 7b$.

.....

.....

.....

.....

1- Choose the correct answer:

2

- a In the following expression: $2a - 5b - 7$, the coefficients are and
(2,5 , 2,7 , -5,7 , 2,-5)
- b If the scale drawing is 500 : 1, that represents
(minimization , equation , magnification , expression)

2- Answer each of the following:

8

- a Write all subsets of the following set $X = \{ 3, 2, 7 \}$, then mention their number.
.....
.....
- b If the length of an insect in a microscope is 8.4 cm, and the scale drawing is 12 : 1, find its real length in mm.
.....
.....
- c Alaa reads 10 pages in 40 minutes, what is the time in hours she needs to read 120 pages if she reads at the same rate?
.....
.....
.....
- d Three persons shared 7,200 L.E. in the ratio of 3 : 4 : 5, calculate the share of each one.
.....
.....
.....
.....
.....

1- Choose the correct answer:

2

- a The multiplicative inverse of $0.\overline{23}$ is ($\frac{23}{99}$, $\frac{23}{100}$, $\frac{99}{23}$, 0.23)
- b The additive inverse of number 0 is (1 , 0 , -1 , \emptyset)

2- Answer each of the following:

8

- a A square of $2\frac{1}{4}$ cm side length, find its area.

.....

.....

- b The ratio between two numbers is 2 : 5, if the smaller number is 48, what is the larger number?

.....

.....

.....

.....

- c Solve the following proportions:

a. $\frac{3}{4} = \frac{x}{20}$

b. $\frac{15}{x} = \frac{30}{12}$

a.

b.

- d If the length of an ant in a microscope is 9.5 cm, and the scale drawing is 10 : 1. Find its real length in mm.

.....

.....

1- Choose the correct answer:

2

- a If $\frac{x-2}{3} = \frac{35}{21}$, then the value of $x =$ (2 , 3 , 5 , 7)
- b If $x = |-4|$ and $y = -3$, then $x + y =$ (-7 , 7 , 1 , -1)

2- Answer each of the following:

8

- a Use the properties of operation in \mathbb{Z} to find:
 - a. $-4 \times (-19) \times 25$
.....
.....
.....
 - b. $-6 + (-13) + 6$
.....
.....
.....
- b If the ratio among the side lengths of a triangle with a perimeter of 135 cm is 7 : 5 : 3. Find the length of its longest side.
.....
.....
.....
- c If a mobile costs 9,400 L.E. How much is it after adding a 12% tax rate?
.....
.....
.....
- d If $A = \{ 5, 2, 3, 7 \}$, $B = \{ 4, 5, 7 \}$, and $C = \{ 7, 2 \}$ find:
 - a. $A \cap B \cap C$
 - b. $(A \cup B) \cap C$

MATHEMATICS

إجابات نماذج اختبارات الأضواء

لشهر أكتوبر

الصف
1
الإعدادي



1- Choose the correct answer:

- a If $\frac{2}{3} = \frac{12}{c}$, then the value of $c - 2 = \dots\dots\dots$ (18 , 16 , 14 , 7)
- b A meal costs 150 L.E., and 18% of the cost is added as the meal's profit.
 , then the meal's price = $\dots\dots\dots$ L.E. (170 , 177 , 150 , 98)

2- Answer each of the following:

- a If $b = 7$, and $c = -1$, then find the value of the expression: $2b^2 - 3b \div -(c)$
- $$2b^2 - 3b \div -(c)$$
- $$= 2 \times 7^2 - 3 \times 7 \div -(-1)$$
- $$= 2 \times 49 - 21 \div 1$$
- $$= 98 - 21 = 77$$
- b A plumber has a pipe $64 \frac{5}{8}$ dm long. He first cuts off a part $2 \frac{7}{8}$ dm from the end of the pipe, and then he cuts off another $1 \frac{3}{8}$ dm.
- How long is the remaining part of the pipe?
- The remaining part of the pipe $= 64 \frac{5}{8} - [2 \frac{7}{8} + 1 \frac{3}{8}]$
- $$= 64 \frac{5}{8} - 3 \frac{10}{8} = 60 \frac{3}{8} \text{ dm.}$$
- c Add the expression: $7y - 3x - 6z$ to the expression: $z - 2y - 5x$.
- $$7y - 3x - 6z + z - 2y - 5x$$
- $$= 7y - 2y - 3x - 5x - 6z + z$$
- $$= 5y - 8x - 5z$$
- d Find in \mathbb{Q} the solution set of the equation: $2(2x - 5) - 2 = x$
- $$2(2x - 5) - 2 = x$$
- $$4x - 10 - 2 = x$$
- $$4x - x - 12 = 0$$
- $$3x = 12 \quad , \quad x = 4 \quad , \quad \text{then the solution set} = \{ 4 \}$$

1- Choose the correct answer:

- a Which of the following sums has a positive sign?

($19 + (-26)$, $-35 + 17$, $-25 + (-12)$, $40 + (-18)$)

- b $\frac{5}{25} = \dots\dots\dots\%$

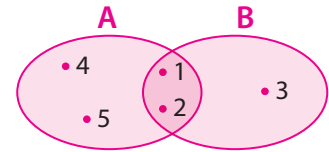
(35 , 20 , 45 , 50)

2- Answer each of the following:

- a From the opposite Venn diagram,

• $A \cup B = \dots\dots\dots \{1, 2, 3, 4, 5\} \dots\dots\dots$

• $A \cap B = \dots\dots\dots \{1, 2\} \dots\dots\dots$



- b A car uses 5 liters of petrol to cover a distance of 60 km, how much petrol would the car need to cover the distance of 180 km if it travels at the same rate?

Let x be what the car needs to cover 180 km.

$$\text{So, } \frac{5}{60} = \frac{x}{180}$$

$$60x = 5 \times 180$$

$$\text{, then } x = 900 \div 60 = 15 \text{ liters}$$

- c A square of $1\frac{3}{4}$ cm side length, find its perimeter.

$$\text{The perimeter of the square} = 4 \times \text{side length}$$

$$= 4 \times 1\frac{3}{4} = 7 \text{ cm}$$

- d If $a = -3$ and $b = 7$, then find the value of the expression: $2a^2 - 7b$.

$$2a^2 - 7b$$

$$= 2 \times (-3)^2 - 7 \times 7$$

$$= 2 \times 9 - 7 \times 7$$

$$= 18 - 49 = -31$$

1- Choose the correct answer:

- a In the following expression: $2a - 5b - 7$, the coefficients are and
 (2,5 , 2,7 , -5,7 , 2,-5)
- b If the scale drawing is 500 : 1, that represents
 (minimization , equation , magnification , expression)

2- Answer each of the following:

- a Write all subsets of the following set $X = \{ 3, 2, 7 \}$, then mention their number.

The subsets of set X are: $\{ 3 \}$, $\{ 2 \}$, $\{ 7 \}$, $\{ 2, 3 \}$, $\{ 2, 7 \}$, $\{ 3, 7 \}$, $\{ 3, 2, 7 \}$, \emptyset

The number of subsets of X = 8

- b If the length of an insect in a microscope is 8.4 cm, and the scale drawing is 12 : 1, find its real length in mm.

The real length = Length in drawing \div scale drawing

$$= 8.4 \div \frac{12}{1} = 8.4 \div 12 = 0.7 \text{ cm} \times 10 = 7 \text{ mm}$$

- c Alaa reads 10 pages in 40 minutes, what is the time in hours she needs to read 120 pages if she reads at the same rate?

Let x be the time she needs.

$$\text{So, } \frac{10}{40} = \frac{120}{x}$$

$$10x = 120 \times 40, \text{ then } x = 4,800 \div 10 = 480 \text{ minutes} = 8 \text{ hours}$$

- d Three persons shared 7,200 L.E. in the ratio of 3 : 4 : 5, calculate the share of each one.

The sum of ratios of the three persons = $3 + 4 + 5 = 12$

The value of one part = $7,200 \div 12 = 600$ L.E.

So, The share of the 1st person = $3 \times 600 = 1,800$ L.E.

The share of the 2nd person = $4 \times 600 = 2,400$ L.E.

The share of the 3rd person = $5 \times 600 = 3,000$ L.E.

1- Choose the correct answer:

- a The multiplicative inverse of $0.\overline{23}$ is $(\frac{23}{99}, \frac{23}{100}, \frac{99}{23}, 0.23)$
- b The additive inverse of number 0 is $(1, 0, -1, \emptyset)$

2- Answer each of the following:

- a A square of $2\frac{1}{4}$ cm side length, find its area.

The area of the square = Side length \times side length

$$= 2\frac{1}{4} \times 2\frac{1}{4} = \frac{81}{16} = 5\frac{1}{16} \text{ cm}^2$$

- b The ratio between two numbers is 2 : 5, if the smaller number is 48, what is the larger number?

Smaller number : Larger number

$$\begin{array}{ccc} 2 & : & 5 \\ 48 & : & x \end{array}$$

$$\text{Larger number } (x) = \frac{5 \times 48}{2} = 120$$

- c Solve the following proportions:

a. $\frac{3}{4} = \frac{x}{20}$

a. $x = 15$

b. $\frac{15}{x} = \frac{30}{12}$

b. $x = 6$

- d If the length of an ant in a microscope is 9.5 cm, and the scale drawing is 10 : 1. Find its real length in mm.

The real length = Length in drawing \div scale drawing

$$= 9.5 \div \frac{10}{1} = 9.5 \div 10 = 0.95 \text{ cm} = 9.5 \text{ mm}$$

1- Choose the correct answer:

- a If $\frac{x-2}{3} = \frac{35}{21}$, then the value of $x = \dots\dots\dots$ (2 , 3 , 5 , 7)
- b If $x = |-4|$ and $y = -3$, then $x + y = \dots\dots\dots$ (-7 , 7 , 1 , -1)

2- Answer each of the following:

a Use the properties of operation in \mathbb{Z} to find:

- a. $-4 \times (-19) \times 25$
 $= -4 \times 25 \times (-19)$ (Commutative property)
 $= (-4 \times 25) \times (-19)$ (Associative property)
 $= -100 \times (-19) = 1,900$ (Clouser property)
- b. $-6 + (-13) + 6$
 $= -6 + 6 + (-13)$ (Commutative property)
 $= (-6 + 6) + (-13)$ (Associative and additive inverse)
 $= 0 + (-13) = -13$ (Additive identity)

b If the ratio among the side lengths of a triangle with a perimeter of 135 cm is 7 : 5 : 3 .
Find the length of its longest side.

1 st side	:	2 nd side	:	3 rd side	:	Perimeter
7	:	5	:	3	:	15
?	:		:		:	135

The length of the longest side = $\frac{7 \times 135}{15} = 63$ cm

c If a mobile costs 9,400 L.E. How much is it after adding a 12% tax rate?

The price	:	Tax rate	:	The price after tax
100%	:	12%	:	112%
9,400	:		:	?

The price after tax = $\frac{112 \times 9,400}{100} = 10,528$ L.E.

d If $A = \{5, 2, 3, 7\}$, $B = \{4, 5, 7\}$, and $C = \{7, 2\}$ find:

- a. $A \cap B \cap C$ b. $(A \cup B) \cap C$
- a. $A \cap B \cap C = \{7\}$
- b. $(A \cup B) \cap C = \{2, 3, 4, 5, 7\} \cap \{7, 2\} = \{7, 2\} = C$

تطبيق



مذكرات جاهزة للطباعة

لتحميل الملفات التعليمية مجاناً للمعلم والطالب

مذكرات وملازم / مراجعات وملخصات / امتحانات / كتب الوزارة /
أدلة المعلم / دفاتر التحضير / سجلات مدرسية / أوراق تأسيس

امسح الكود بموبايلك علشان تقدر تثبت التطبيق

وتقدر ف أي وقت تحمّل ال نفسك فيه ببلاش

هيغنيك عن البحث والجروبات والقنوات الكتيرة

