

## الصف الثامن - الرياضيات

✚ Choose the correct answer

1) Which of these is the smallest?

- A) 0.723
- B) 0.273
- C) 0.4
- D) 0.25
- E) 0.123

2) If  $x - y = 7$  and  $\frac{x}{2} = 4$  what is the value of  $y$  ?

- A) 1
- B) 7
- C) -2
- D) -1
- E) -3

3) If  $M = 48$  and  $k = 8$  and  $p = 6$

Which of the following is true?

- A)  $k = \frac{p}{m}$
- B)  $k = \frac{m}{p}$
- C)  $m = \frac{p}{k}$
- D)  $m = k + p$
- E)  $K = m p$

4) A runner ran 6000 m in exactly half hour, what was his average speed in meters per second?

- A) 4
- B) 3.33
- C) 6
- D) 15
- E) 5

5) The following table shows some values of x and y where x is proportional to y

x	3	12	Q
y	4	P	36

What are the value of P and Q ?

- A) P=13 and Q = 35
- B) P = 16 and Q =18
- C) P =20 and Q =30
- D) P=16 and Q = 27
- E) P = 20 and Q = 27



A) Fahad bought two brands of tea. The first one for AUD 5 (AUD : Australian Dollar ) and the second for SGD 6 ( SGD : Singapore Dollar ) Which brand is the cheaper?  
 (Hint: 1 AUD =QR 3.4 and 1 SGD = QR 2.6)  
 Show your work

Answer: .....

B) A football team is made up of these fractions. If  $\frac{1}{2}$  of the players is from Qatar,  $\frac{1}{3}$  is from Bahrain and the rest are from Oman. What is the fraction of the Omani player.

Answer : .....

Show your work



A) Complete the following table

X	Y
1	2
3	8
5	14
7	.....
9	.....

Write the equation that represents the table

Answer.....

B) Khaled and Maha calculated the following expression:

$$-36 \div 9 ( 10 - 6 ) + 2^2$$

Khaled calculated it as :  $-36 \div 36 + 4 = 3$

Maha calculated it as:  $- 4 \times 4 + 4 = -12$

Which one is right? Khaled or Maha?

Answer: .....

Explain your answer



A) Describe and correct the error

$$\frac{1}{4}x - \frac{2}{3} = 4$$

Solution:

$$12\left(\frac{1}{4}x\right) - 12\left(\frac{2}{3}\right) = 4$$

$$3x - 8 = 4$$

$$3x = 12$$

$$X = 4$$

Error : .....

Correct solution:

Show your work

B) Determine whether the value  $x = 1$  is a solution of

$$6(3 - x) - 5(2x - 1) = 7$$

Show your work

Answer : .....

✚ The following table shows scores for a class on a 10- point test

Test Score	Frequency
4	2
5	4
6	6
7	3
8	7
9	2
10	1

Use the above table to answer the following

1) How many in the class had a score greater than 6?

Answer:.....

2) What is the probability of getting a score 5 or 6?

Answer:.....

3) Find the mode of the above scores?

Answer:.....

4) Anas claims there is about 10% of students got a score more than 7. Is it right?

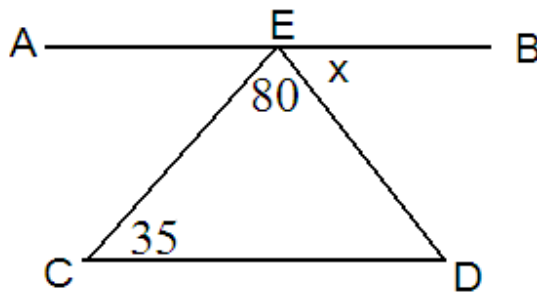
Explain your answer

✚ If 6 times a number is 72 what is  $\frac{2}{3}$  of the number?

✚ A sheet of paper is 0.015cm thick what the height of a stack of 5000 sheet of this paper in meter?

✚ When -5 is subtracted from the sum of -3 and 7 the result is :

✚ If AB is parallel to CD . Find the measure of angle x



✚ Solve for x  $1-2x < 7$

✚ The angles of a triangle are in the ratio 1:3:5  
The measure of the largest angle is

✚ Find the, missing number in the sequence  
1, 5, 7, 11, 13, 17, 19, ....., ...

✚ Drive 150km in 2 hours and stop

1 hour, then drive 150 km in 2 hours what is the average speed?

✚ If  $x=-2$  what is the value of 
$$\frac{3x^2 - x}{3 - 2x}$$

- ✚ If  $m$  and  $n$  are two negative integers and  $m < n$ , compare between  $m^2$  and  $n^3$

✚ If  $\frac{3x}{2x+1} = \frac{3}{4}$  what is the value of  $2x-1$

✚ If  $2a+b=7$  find  $6a+3b+4$

- ✚ A painter had 20L of paint. He used 1.5L of paint every hour. He finished the job in 270 min. How much paint did he had left?

- ✚ The table below shows a relation between  $x$  and  $y$

X	1	3	4	6
Y	1	7	10	16

**Find the equation**

- ✚ A base ball team won 50 of the first 92 games played in season. If the season consists of 152 games how many more games must the team win to finish the

season winning  $62\frac{1}{2}$  % of game played?

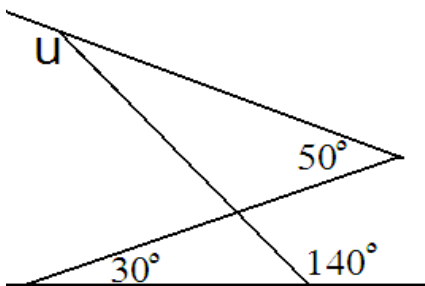
- ✚ Given that  $x^2+4y^2=40$  and  $xy=6$ . Find  $(x+2y)^2$

- ✚ The mean of a set of eight numbers is 18.5 given that six of the numbers are 13, 14, 16, 19, 23 and 24. Find the mean of the other two numbers.

- ✚ There are 36 green balls and some red balls in a box. One ball is selected at random. Given the probability that it is red  $\frac{1}{4}$ . Find the number of red balls in the box.

- ✚ The total cost of the tickets to a show for 2 adults and 3 children is \$ 16, while the cost for 3 adults and 2 children is \$19. Find the cost of an adult ticket.

- ✚ Find the size of the angle labeled  $u$  in the following figure



- ✚ Three boxes weigh in average 7kg, if the 1st box weighs 4kg and the 2nd weighs 9kg. Find the 3rd box weight?

- ✚ The population of Qatar has increased from 1,000,000 to 1,800,000 what is the percent of increase?

✚ A volume of a cube twice its total area find the area of its one face.

✚ Oranges are packed in boxes .the average diameter of the orange is 5cm. and the boxes are 50cm long , 20 cm wide and 15 cm deep , approximate the number of oranges that can be packed in a box

✚ A thin wire 30 cm long is formed into a rectangle. If the length of this rectangle is 6cm what is it is area of rectangle?

✚ About 14000 of newspapers are sold each week. Approximate how many newspapers are sold each year?

✚ Given that  $x^2+4y^2=42$  and  $xy=7$ .  
Find  $(x+2y)^2$

✚ The length of tennis court is 6 feet more than twice the width. find the width of the court if the length is 78 feet

✚ Two cars start at a given point and travel in the same direction at average speeds of 45 miles per hour and 52 miles per hour. How far apart will they be in 4 hours?

✚ If  $4x^2 - y^2 = 24$  and  $2x - y = 4$   
what is the value of  $4x + 2y$

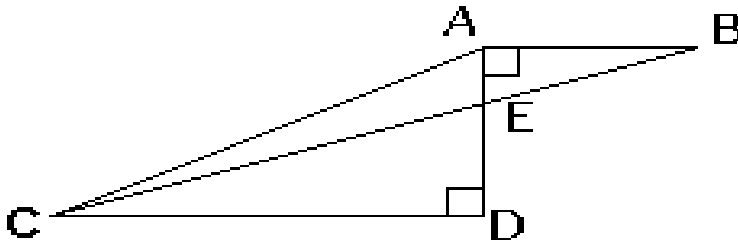
✚ Solve :

$$2x - 3(x - 1) = 4 - (2x - 5)$$

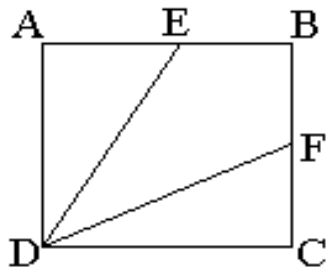
✚ The mean of a set of eight numbers is 18.5 given that six of the numbers are 13, 14, 16, 19, 23 and 24. Find the mean of the other two numbers

✚ In the figure below  $AD = 4$ ,


$AB = 3$  and  $CD = 9$ . What is the area of triangle  $AEC$  ?



✚ .  $ABCD$  is a square of side 3, and  $E$  and  $F$  are the mid points of sides  $AB$  and  $BC$  respectively. What is the area of the quadrilateral  $EBFD$



✚ A teacher and student each have the 48 books if  $\frac{1}{3}$  of the students books and  $\frac{1}{4}$  of the teachers books are novels, how many more novels does the student have than the teacher?

 **A volume of a cube twice its total area find the length of its side.**