

iii) How many squares are there in the given figure ?



- a) a b) 7 c) 8 d) 9

Quarterly Examination 2018-2019
Mathematics

Class : VII

Time : 2Hrs.+15 min.

Full Marks : 80

SECTION - A [20 marks]

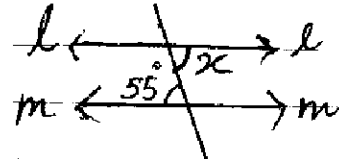
Q1. Fill in the blanks : [10]

- i) If $P = -2$, the value of $5p - 2 =$ _____
- ii) $(-245) + 345 + (-148) - (-150) =$ _____
- iii) While opening a bottle cap, the direction of rotation is _____.
- iv) The lowest form of the product $2 \frac{3}{7} \times \frac{7}{9}$ is _____
- v) The number of significant figures in 0125.090 is _____
- vi) $162 \text{ km/h} =$ _____ m/s
- vii) The centre of rotation for a square is _____ where as its order of rotation is _____.
- viii) $7x^2 y$ and $-2yx^2$ are _____ terms.
- ix) 78.046 rounded off to the hundredths place is _____

Q2. Choose and write the correct answer. [5]

- i) $-xy - (-5xy)$ is equal to
a) $-6xy$ b) $6xy$ c) $-4xy$ d) $4xy$
- ii) In the adjoining figure, if L is parallel to m then the value of x is.

{Turn Over}



- a) 125° b) 50° c) 55° d) 100°

iii) On the number line, the value of $(-3) \times 3$ lies on the right hand side of

- a) 10 b) -10 c) 8 d) -8

iv) 079.205 rounded off to 4 significant figures is

- a) 7920 b) 079.2 c) 79.21 d) 079.20

v) In the words 'MATHS' which of the following pairs of letters have rotational symmetry

- a) M & T b) A & S c) T & S d) H & s

Q3. State whether the following statements are true or false. [4]

- Two obtuse angles can form a linear pair
- $0.32 \div 8 = 0.4$
- 30° is half of its complement
- Sum of 2 and p is 2 p.

Section B

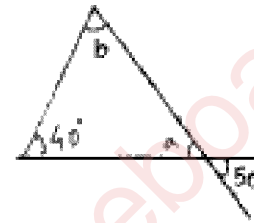
Q4. Solve the following sums. [2x9]

- Smita had Rs. 1250 in her bank account. On Monday, she withdrew Rs. 650. On Tuesday she deposited Rs. 1100 and again withdrew Rs. 875 on Wednesday. What was her account balance on Thursday?
- If 15 men can pack 540 parcels per day, how many men are needed to pack 396 parcels per day?

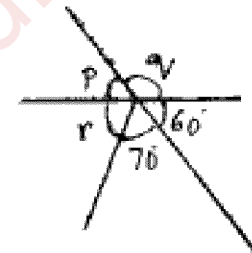
iv) Find the value of unknown angles.
(Give reasons also)

[2+3+3]

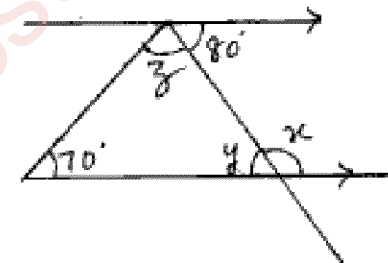
a)



b)



c)



Section F [3 marks]

Logical reasoning questions

Q8. Choose the correct option.

- i) Given that $\star + \star + \smile = \smile + \smile + \smile + \smile$
If each \smile stands for $\frac{1}{4}$, what does each \star stand for?

- a) $\frac{3}{4}$ b) $\frac{3}{2}$ c) $\frac{3}{8}$ d) $\frac{1}{4}$

ii) Priyanka is shorter than Shikha and taller than Sneha. If Sneha is taller than Yukti, who is the shortest among them?

- a) Priyanka b) Shikha c) Sneha d) Yukti

- iii) Simplify $\rightarrow \frac{a}{2} - \frac{a}{3} - \frac{a}{4} + a$
- iv) $18.376 - 5.43 - 8.8976$
- v) Insert four fractions between $\frac{2}{5}$ and $\frac{1}{3}$
- vi) Find the mean ages of six students, whose ages are :
15, 13, 16, 13, 14, 16.
- vii) How much is $3p - 4q + r$ less than $4p + 3q - 5r$?
- viii) When $a = 0$, $b = -1$, find the value of $a^2 + ab + 2$
- ix) Find the supplementary angle of $\frac{3}{7}$ of 280° .

Section C [10 marks]

Q5. Solve :

- i) Two trains A and B 190m and 210m long are moving along parallel tracks with speeds 60 km/hr and 90km/h respectively. How long will train A take to overtake train B ?
- ii) 5 men can paint the new school hall in 18 hours. How many men will be able to paint it in 10 hours ? [3]
- iii) $[78 + 15 \times \{ (144 \div 2) - 5 \}] + 51$. [3]

Section D [15 marks]

- (i) A car running at 45km/h takes 6 hours to cover a journey. At what speed must it travel to complete the journey in 8 hours. [3]
- (ii) $(4 \frac{1}{2} - \frac{2}{3}) \div \frac{7}{12} + 5 \frac{1}{2}$ of $3 \frac{5}{6}$ [4]

{Turn Over}

- iii) Simplify $\rightarrow \frac{a}{2} - \frac{a}{3} - \frac{a}{4} + a$
- iv) $18.376 - 5.43 - 8.8976$
- v) Insert four fractions between $\frac{2}{5}$ and $\frac{1}{3}$
- vi) Find the mean ages of six students, whose ages are :
15, 13, 16, 13, 14, 16.
- vii) How much is $3p - 4q + r$ less than $4p + 3q - 5r$?
- viii) When $a = 0$, $b = -1$, find the value of $a^2 + ab + 2$
- ix) Find the supplementary angle of $\frac{3}{7}$ of 280° .

Section C [10 marks]

Q5. Solve :

- i) Two trains A and B 190m and 210m long are moving along parallel tracks with speeds 60 km/hr and 90km/h respectively. How long will train A take to overtake train B ?
- ii) 5 men can paint the new school hall in 18 hours. How many men will be able to paint it in 10 hours ? [3]
- iii) $[78 + 15 \times \{ (144 \div 2) - 5 \}] + 51$. [3]

Section D [15 marks]

- (i) A car running at 45km/h takes 6 hours to cover a journey. At what speed must it travel to complete the journey in 8 hours. [3]
- (ii) $(4 \frac{1}{2} - \frac{2}{3}) \div \frac{7}{12} + 5 \frac{1}{2}$ of $3 \frac{5}{6}$ [4]

{Turn Over}

- iii) The heights (in cm) of 90 plants in a garden are given below —

height (in cm)	58	60	62	64	66	74
Number of plants	20	25	15	8	12	10

Find the mean height [4]

- iv) a) Write the algebraic expression for the statement three times a number x is subtracted from the product of x with itself.
 b) What type of algebraic expression is this ?
 c) What is the degree of this Polynomial ?
 d) Write down the coefficient of x in this expression. [4]

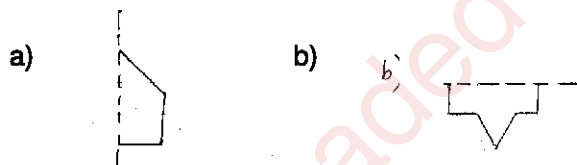
Section E [15 marks]

Q7. Do as directed

- i) Copy the figures and draw the lines of symmetry.[2]



- ii) Copy the figures and draw their reflection. The dotted line is the mirror line. [2]



- iii) Copy and complete the table. [3]

	Centre of rotation	Angle of rotation
Circle		
equilateral triangle		
Rectangle		

- iii) The heights (in cm) of 90 plants in a garden are given below —

height (in cm)	58	60	62	64	66	74
Number of plants	20	25	15	8	12	10

Find the mean height [4]

- iv) a) Write the algebraic expression for the statement three times a number x is subtracted from the product of x with itself.
 b) What type of algebraic expression is this ?
 c) What is the degree of this Polynomial ?
 d) Write down the coefficient of x in this expression. [4]

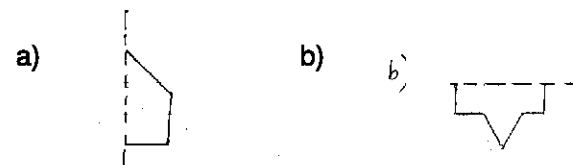
Section E [15 marks]

Q7. Do as directed

- i) Copy the figures and draw the lines of symmetry.[2]



- ii) Copy the figures and draw their reflection. The dotted line is the mirror line. [2]



- iii) Copy and complete the table. [3]

	Centre of rotation	Angle of rotation
Circle		
equilateral triangle		
Rectangle		