

MODEL QUESTION PAPER

MATH – I 9TH

MARKS 40

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Q.NO.1 : Solve the following activity. 5

1) $A = \{1, 2, 3, 4, \dots, 10\}$ which type of set A?

i) Empty set ii) finite set iii) infinite set iv) universal set

2) The number 0.4 in p/q form is

i) $\frac{2}{5}$ ii) $\frac{3}{1}$ iii) $\frac{3}{1}$ iv) $\frac{1}{25}$

3) Write degree of polynomial $2x^2 + 5x^3 + 7$

i) 1 ii) 3 iii) 5 iv) 0

4) what is the ratio of 1mm to 1cm ?

i) 1:100 ii) 10:1 iii) 1:10 iv) 100:1

5) If $6:5 = y : 20$, then what will be the value of Y?

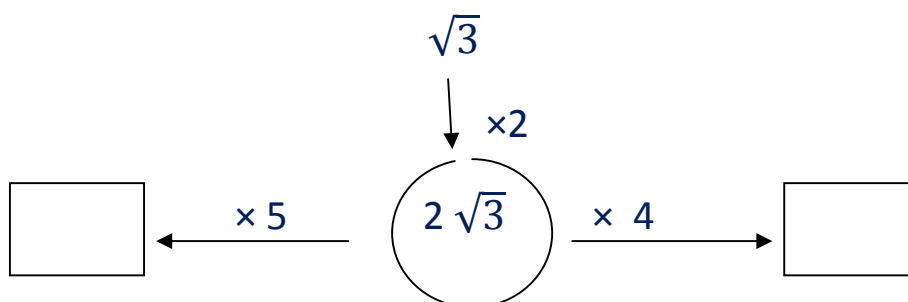
i) 15 ii) 24 iii) 18 iv) 22.5

(B) Attempt the following activity. 5

1) Set P is the first five multiple 6 write set in Roster form.

2) What is the mean proportional of 8 and 18 ?

3) Complete the web diagram

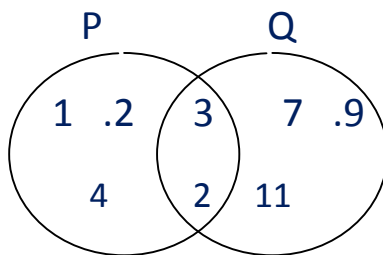


4) Find the value of polynomial $2x^2 + 2x$ if $x = 1$.

5) $N = \{2, 4, 6\}$ and $M = \{1, 3, 5\}$ then $M \cap N = ?$

Q.NO 2: Solve the following activity. (any 4)**8**

1) Observe the following figure and write set P and set Q.



2) Fill the boxes Using rules of ratio and proportion $\frac{a}{3} = \frac{b}{4} = \frac{4}{\quad} = \frac{6}{\quad} = \frac{4+6}{\quad}$

3) To compare the surds complete the following activity.

$$7\sqrt{2} = \sqrt{49 \times 2} = \boxed{}$$

$$5\sqrt{2} = \boxed{} = \sqrt{75}$$

$$7\sqrt{2} \boxed{} 5\sqrt{3} \rightarrow (\text{ use } > <)$$

4) Poonam completed her running in 7 mint 20 sec while Neelam completed same in 5 mint 5 Sec complete the following activity.

$$7 \text{ min} + 20 \text{ sec} = 7 \times 60 = \boxed{} + 20 \text{ sec} = 440 \text{ sec}$$

$$5 \text{ mint} + 6 \text{ sec} = \boxed{} = \boxed{} + 6 \text{ sec} = \boxed{}$$

5) write the polynomial $x^3 - 3x^2 + 4x - 8$ in coefficient form

6) Express the recurring decimal 0.555..... in $\frac{p}{q}$ form.

7) write the following statements in symbolic form.

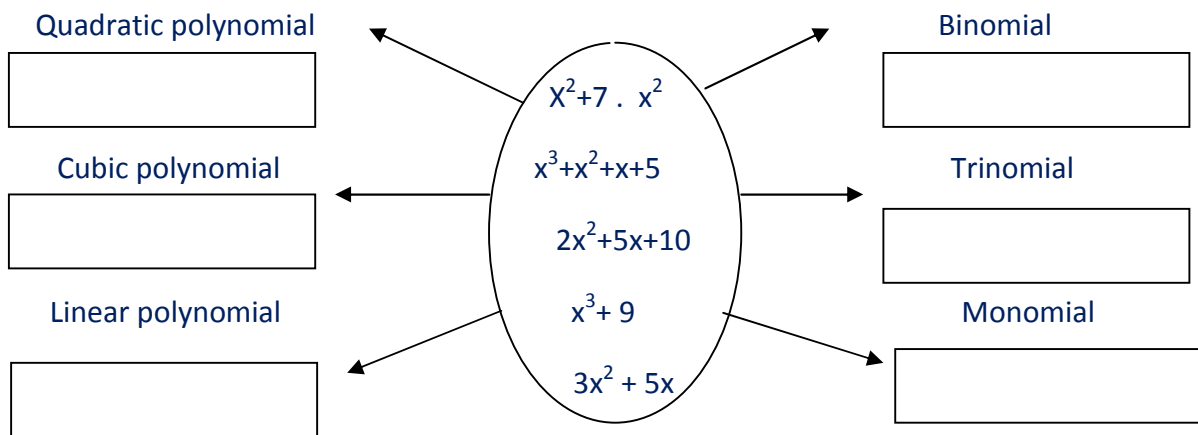
i) $\frac{4}{3}$ is an element of the set Q ii) -2 is not an element of set N

Q.NO 3: complete the following activity (Any 3)**9**

1) The ratio of two numbers is 31: 23 and their sum is 216.Find these numbers.

2) Rationalize the denominator $\frac{1}{\sqrt{7}+\sqrt{2}}$

3) write the appropriate polynomials in the boxes.



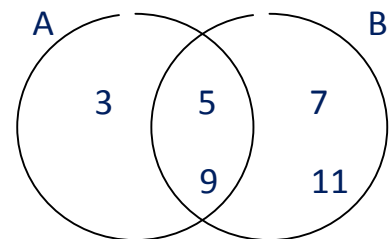
4) The ratio of the present ages of Rehana and her mother is 2 : 7. After 2 years the ratio of their ages will be 1 : 3 . What is Rehana's present age?

5) Observe the given Venn diagram and complete activity.

$n(A) =$ $n(B) =$

$n(A \cap B) =$ $n(A \cup B) =$

verify $n(A \cup B) = n(A) + n(B) - n(A \cap B)$

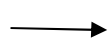


Q.NO. 4: complete the following activity.

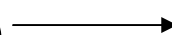
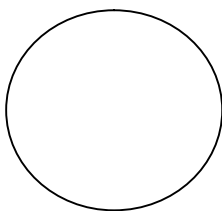
(Any 2)

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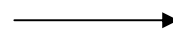
1) Observe the diagram and answer the following questions.



My name is Rectangle the ratio of my Length & Breadth is 4 : 3 and perimeter is 42 cm.



My name is circle. radius is 'r' and diameter '2r'



I am a square my side is 4cm.

- i) Find the length and breadth of rectangle ii) write the ratio radius of circle to its diameter
 lii) What is the ratio of side of square to its perimeter?

