

Q1 (A). Choose the correct alternative and rewrite

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- The number associated with the point is called ____ of that point.
A. Origin B. Midpoint C. Co-ordinate D. Graph.
- If a transversal intersect two parallel lines such that the ratio between the interior angles on one side is 2:7 then what is the measure of greater angle.
A. 20° B. 160° C. 40° D. 140°
- The number of angles formed by a transversal of two lines is ____
A. 4 B. 2 C. 8 D. 10
- Interior angle test states that ____
A. If lines are parallel then interior angles are congruent.
B. If lines are parallel then interior angles are supplementary.
C. If interior angles are congruent then the lines are parallel
D. If interior angles are supplementary then the lines are parallel

(B) Solve the following

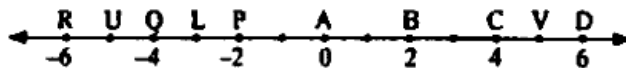
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- Write the conditional statement of "Diagonals of Rhombus are perpendicular bisector of each other"
- Point P is midpoint of AB If $AP = 4.5$ find BP <https://www.maharashtrastudy.com>
- If X-Y-Z $\angle(XZ) = 5\sqrt{2}$ $\angle(XY) = 2\sqrt{2}$ find YZ
- In ΔPQR $\angle P = 77^\circ$ $\angle Q = 29^\circ$ then find $\angle R$

Q2. (A) Complete any two of the following activity

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- Observe the number line and fill in the blanks:



$d(U, V)$

The co-ordinate of point U is _____

The co-ordinate of point V is _____

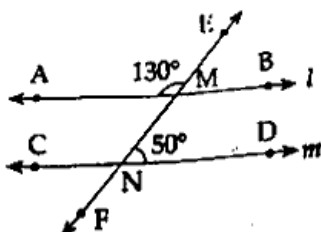
$$d(U, V) = \underline{\quad} - \underline{\quad}$$

$$= 5 - \underline{\quad}$$

$$= 5 + \underline{\quad}$$

$$d(U, V) = (\quad)$$

- In the adjoining figure show that line $l \parallel$ line m



$$b = a (\quad)$$

$$\therefore b = \underline{\quad}$$

Line n // line p on transversal m

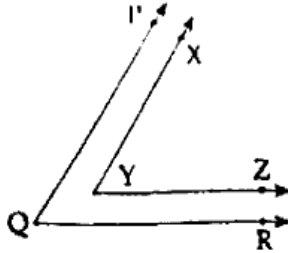
$$c = \underline{\quad} \text{ (corresponding angle theorem)}$$

$$\therefore c = \underline{\quad}$$

B) Solve the following (any two)

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1/ In fig sides of $\angle PQR$ and $\angle XYZ$ are parallel to each other Prove that $\angle PQR \cong \angle XYZ$



2. The table show the points on a number line and their co-ordinate. Decide whether the pair of segment are congruent or not.

Points	P	Q	R	S	T
Co-ordinate	-3	4	2	-5	9

- Seg PQ and Seg QS
- Seg RS and seg PQ

3. Prove that vertical angle formed by two intersecting lines are congruent.

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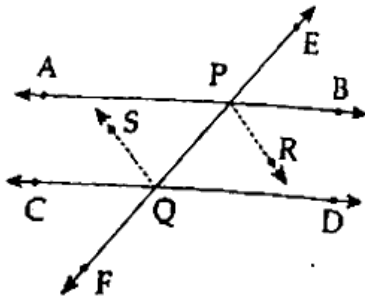
Q4. A) Solve any two

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1. Write Euclids five Postulates .

2. Prove that "The sum of the measure of all angles of triangle is 180° "

3. A transversal EF of line AB and line CD intersects the line P and Q respectively. Ray PR and Ray QS are parallel and bisector of $\angle BPQ$ and $\angle PQC$ respectively prove that AB // Line CD



B) Solve the following

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1/ Co-ordinates of some pairs of points are given below find the distance between each pair

- $x+7, x-4$
- $-25, -47$
- $0, -4$
- $9, -7$
- $-8, -5$
- $y+5, y+3$