

Chapter: 1

Q.1 A) Choose the correct alternative.

(2)

- 1) If P is the mid point of Seg AB and AB = 11 cm, find AP
a. 5 cm b. 5.5 cm c. 4.5 cm d. 4 cm
- 2) From the given statement, list the antecedent and consequent
If two lines intersect, then the vertically opposite angles are congruent.
a. Antecedent : Two lines intersect
b. Consequent : vertically opposite angles are congruent
c. Both a and b
d. Antecedent : vertically opposite angles are congruent
e. Consequent : Two lines intersect.

B) Solve the following questions.

(2)

- 1) If A is the midpoint of seg PQ and PQ = 9cm, find AP.
- 2) Write the following statement in conditional form.
Every rhombus is a square.

Q.2 A) Complete the following Activities. (Any one)

(2)

- 1) If AB = 5 cm, BP = 2 cm and AP = 3.4 cm, compare the segments.

$$AB = 5 \text{ cm}, BP = 2 \text{ cm}, AP = 3.4 \text{ cm}$$

$$5 \quad \quad 3.4 \quad \quad 2$$

$$\therefore \quad \quad > l(AP) > \quad \quad$$

- 2) If the co-ordinate of A is x and that of B is y, find d(A,B)

$$x = 4, y = -8$$

$$A \leftrightarrow x ;$$

$$x = 4 ,$$

$$x > y$$

$$d(A, B)$$

$$B \leftrightarrow y$$

$$y = -8$$

$$= \quad \quad$$

$$= \quad \quad$$

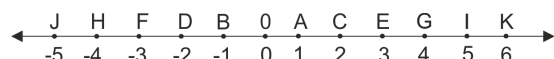
$$= \quad \quad$$

$$d(A, B) = \quad \quad \text{units}$$

B) Solve the following questions. (Any two)

(4)

- 1) Observe the number line and find the distance of d(A, F) and d(B, I)



- 2) Sketch proper figure and write the answers of the following questions.

$$\text{If } R - S - T \text{ and } l(ST) = 3.7, \quad l(RS) = 2.5, \text{ then } l(RT) = ?$$

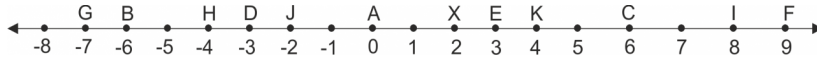
- 3) Draw a labelled figure showing information in each of the following statements and write the antecedent and the consequent.

Two equilateral triangles are similar.

Q.3 Solve the following questions. (Any one)

(3)

- 1) Answer the following Question with the help of figure.



- State the Points which are equidistant from point X.
 - Find $d(H, A)$
 - Write the co-ordinates of point on the number line which are at distance of 6 units from A?
- 2) The following table shows points on a number line and their co-ordinate. Decide whether the pair of segments given below the table are congruent or not.

Point	A	B	C	D	E
Co-ordinate	- 3	5	2	- 7	9

seg BC and seg AD

Q.4 Solve the following questions. (Any one)

(4)

- 1) The co-ordinates of the points on the number line are as follows.

Points	P	Q	R	S	T
Co-ordinates	- 3	5	2	- 7	9

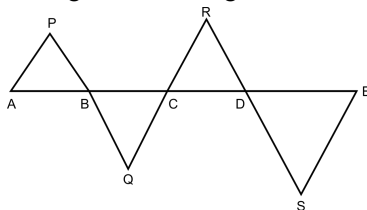
Find the lengths of: seg PQ, seg PR, seg PS, seg PT.

- 2)

In the figure, $l(AC) = 8$, $l(BC) = 5$

Seg $BD \cong \text{seg } CE \cong \text{seg } AC$, then determine whether the segments in each of the following pairs are congruent or not.

- seg BC and seg DE
- seg AB and seg CD.



Q.5 Solve the following questions. (Any one)

(3)

- On a number line, co-ordinates of P, Q, R are 3, -5 and 6 respectively. State with reason whether the following statements are true or false.
 $d(R, P) + d(P, Q) = d(R, Q)$
- On a number line, co-ordinates of P, Q, R are 3, -5 and 6 respectively. State with reason whether the following statements are true or false.
 $d(P, R) + d(R, Q) = d(P, Q)$