

BCM SCHOOL, BASANT AVENUE DUGRI, LUDHIANA
CLASS IX

SUBJECT: MATHEMATICS

ANSWER KEY OF ASSIGNMENT (JULY 2023-24)

CH -3 COORDINATE GEOMETRY AND CH -6 LINES AND ANGLES

MCQ

- Q1 b) 1
Q2 d) (-4, 5)
Q3 b) 40°

ASSERTION REASONING

Q4 c) Assertion is true but reason is false

Q5 $a - b = \frac{1}{3}(90^{\circ})$

$$a - b = 30^{\circ}$$

$$a + b = 180^{\circ}$$

So $a = 105^{\circ}$ and $b = 75^{\circ}$

Q6

$$\angle 1 + \angle 2 = \angle 3 + \angle 4 \text{ (Alternate angles) } \dots (i)$$

Since these angles are bisected, we have,

$$\angle 1 = \angle 2 \text{ and } \angle 3 = \angle 4$$

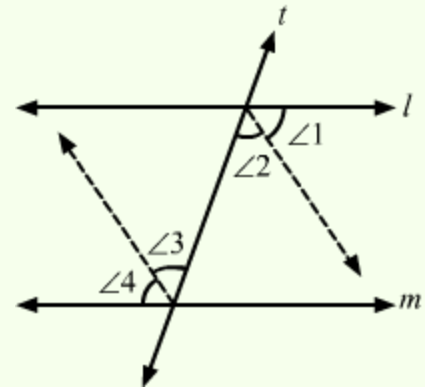
Substituting in (i), we get,

$$\angle 2 + \angle 2 = \angle 3 + \angle 3$$

$$\Rightarrow 2\angle 2 = 2\angle 3$$

$$\Rightarrow \angle 2 = \angle 3$$

As the angle bisectors form pairs of alternate angles, they are parallel.



Q7 CD || EF

$$150^{\circ} + y = 180^{\circ} \text{ (cointerior angles)}$$

$$y = 30^{\circ}$$

AB || CD

$$70^{\circ} = x + y \text{ (alternate angles)}$$

$$\text{So } x = 40^{\circ}$$

CASE STUDY

Q8 i) 3 miles

ii) 3 miles (iii) (6,6)

