

BCM SCHOOL, BASANT AVENUE DUGRI, LUDHIANA  
CLASS IX

SUBJECT: MATHEMATICS  
ASSIGNMENT ( JULY 2023-24)

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

MCQ

Q1 If the coordinates of two points are P ( -2,3) and Q (-3,5) then

(Abscissa of P) – (Abscissa of Q) is

- (a) -5      (b) 1      (c) -1      (d) -2

Q2 What is the mirror image of point (4,5) by taking Y axis as mirror

- (a) (4,5)      (b) (5,4)      (c) (-5,4)      (d) (-4,5)

Q3 Angles of a triangle are in the ratio 2 : 4 : 3 . The smallest angle of the triangle is

- (a) 60°      (b) 40°      (c) 80°      (d) 20°

ASSERTION REASONING

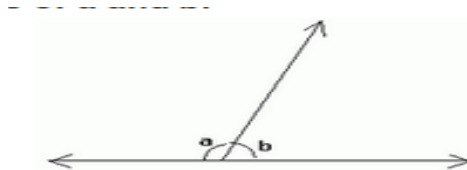
Q4 Assertion: An angle whose measure lies between 180° and 360° is called a reflex angle

Reason: If the sum of two adjacent angles is 180° , then their non common arms may not

form a line .

- (a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).  
(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).  
(c) Assertion (A) is true but reason (R) is false.  
(d) Assertion (A) is false but reason (R) is true

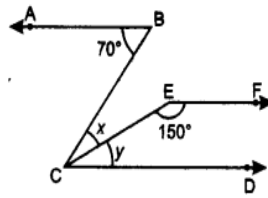
Q5 In the figure , a is greater than b by one third of a right angle. Find a and b



Q6 If two parallel lines are intersected by a transversal , then prove that bisectors of any two alternate angles are parallel

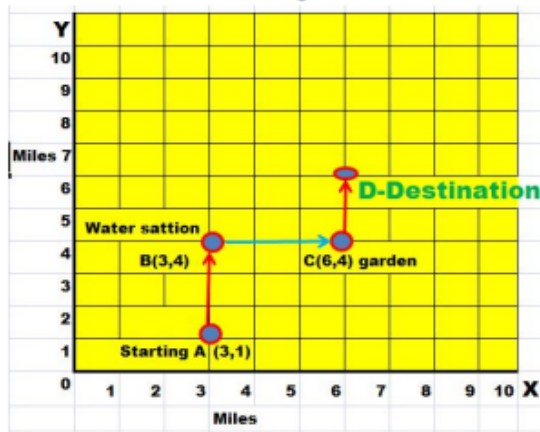
Q7 If AB || EF and EF || CD Then find the value of x





### Case study

Q8 Arun is participating in an 8 miles walk. The organizers used a square coordinate grid to plot the course. The starting point is at A (3, 1). At B (3, 4), there's a water station to make sure the walkers stay hydrated. From water station, the walkway turns right and at C (6,4) a garden is situated to keep walkers fresh. From the garden, the walkway turns left and finally Arun reaches at destination D to complete 8 miles.



- (i) How far is the water station B from the starting point A?
- (ii) How far is the water station B from garden C?
- (iii) What are the coordinates of destination point D?

