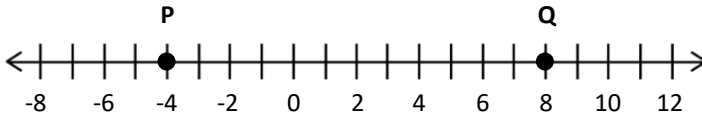
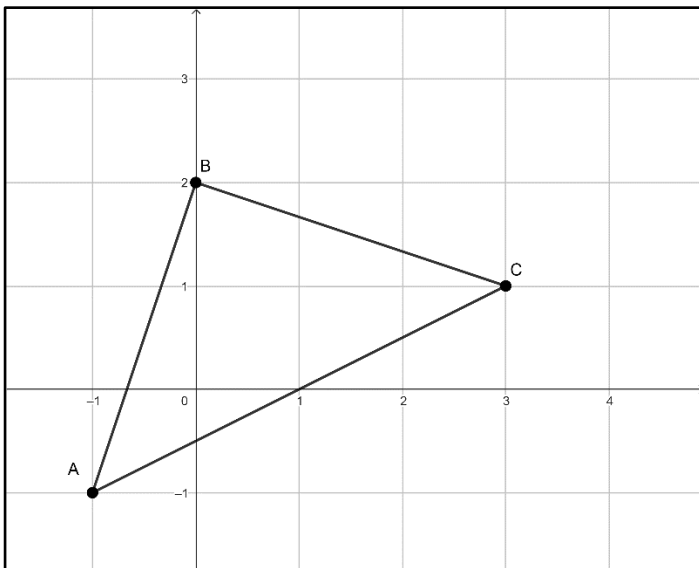


# Coordinate Geometry

1. On the number line below point  $A$  has a weight of 80% and point  $B$  has a weight of 20%. What is the weighted average of points  $A$  and  $B$ ?



- A.  $-2.8$   
B.  $-2$   
C.  $2$   
D.  $7.2$
2. Point  $R$  divides a line segment with endpoints  $P(-2, 6)$  and  $Q(4, 15)$  in the ratio such as that  $PR:RQ = 1:2$ . What are the coordinates of point  $R$ ?
- A.  $(0, 9)$   
B.  $(2, 12)$   
C.  $(9, 0)$   
D.  $(12, 2)$
3. Triangle  $ABC$  is shown below. Select All the true statements.



- A.  $ABC$  is an acute triangle.  
B.  $ABC$  is a right triangle.  
C.  $ABC$  is an obtuse triangle.  
D.  $ABC$  is a scalene triangle.  
E.  $ABC$  is an isosceles triangle.

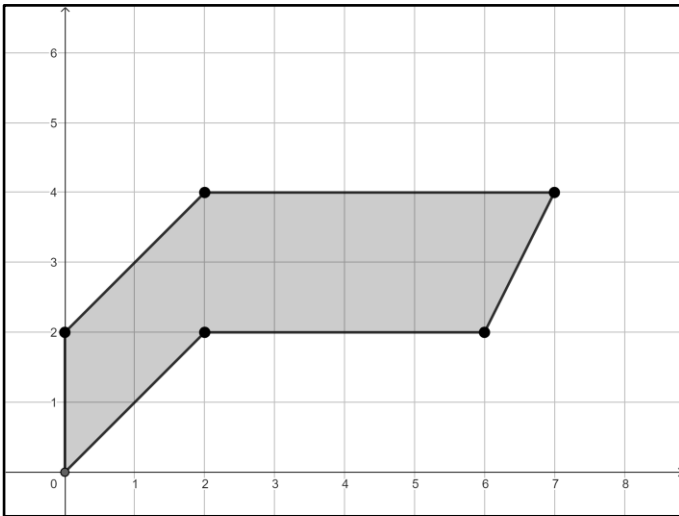
# Coordinate Geometry

4. The ordered pairs that describe the locations of three vertices of a parallelogram on a coordinate plane are given.

$$(-2, -1) \quad (-2, 5) \quad (2, 4)$$

Which ordered pair describes a possible location of the fourth vertex of the parallelogram?

- A.  $(2, -2)$   
B.  $(-2, 2)$   
C.  $(0, 2)$   
D.  $(2, 0)$
5. A landscape artist is designing a stone walkway that crosses a flower garden. In the diagram of the walkway below, each unit represents 1 foot.



What is the area, in square feet, of the stone walkway?

- A. 4  
B. 9  
C. 13  
D. 22