

1. If A(a,-b) is on the 3rd quadrant, then which of the followings is on the 2nd quadrant?

A) A(-a,b) B) A(b,a)
C) A(-b,-a) D) A(-a,-b)
E) A(-b,a)

2. What is the distance between A(-2,5) and B(10,10)?

A) 13 B) 14 C) 15 D) 16 E) 18

3. What is the midpoint M of the segment AB where A(0,4) and B(-4,0)?

A) M(0,0) B) M(-2,2)
C) M(2,-2) D) M(-2,-2)
E) M(2,2)

4. Let M be the midpoint of [AB], where A(2,5) and M(5,4). What are the coordinates of B?

A) (7,2) B) (7,4) C) (4,7) D) (8,4) E) (8,3)

5. If the distance between the points A(3,5) and B(a,2) is 5 units, find the sum of the possible values of a.

A) -6 B) -1 C) 4 D) 6 E) 7

6. If the distance between the points P₁(m,2) and P₂(7,5) is 5 units, then the maximum value of m is

A) 11 B) 3 C) -1 D) -3 E) -11

7. Which one of the followings is the point K on the y-axis which is equidistant to the points A(2,2) and B(-4,0)?

A) K(0,-1) B) K(0,-3/2)
C) K(0,-2) D) K(0,-5/2)
E) K(0,-3)

8. What is the slope of the line $\frac{y}{2} - x = 3$?

A) 1 B) -1 C) 2 D) -2 E) 1/2

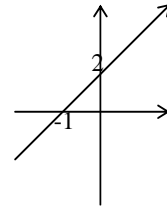
9. What is the slope of the line $\frac{x}{3} - \frac{2y}{5} = 1$?

A) 2/3 B) 3/5 C) 5/6 D) 6/5 E) 5/3

10. The points A(1,1), B(2,3) and C(x,y) are collinear. If $y = 3x - 2$, then find x.

A) -3 B) -2 C) 0 D) 1 E) 2

11. What is the slope of the line given in the figure?



A) -1 B) -2
C) -1/2 D) 2
E) -2

12. Which of the followings has an undefined slope?

A) $y = 5$ B) $x = 4$ C) $y = x$
D) $x + y = 0$ E) $y = 0$

13. Find the intersection of the lines $2x + y = -5$ and $y = -x$.

A) (-5,5) B) (5,5)
C) $(-\frac{5}{3}, \frac{5}{3})$ D) $(\frac{5}{3}, -\frac{5}{3})$

14. What is the intersection of the lines $x + y - 4 = 0$ and $y = 2x - 5$?

A) P(3,1) B) P(5,-1) C) P(2,2)
D) P(6,-2) E) P(1,3)

15. If the slope of the line $(2 - k)x + (3k + 1)y + 5 = 0$ is $\frac{1}{4}$, then find k.

A) 1 B) 5 C) 7 D) 9 E) 12