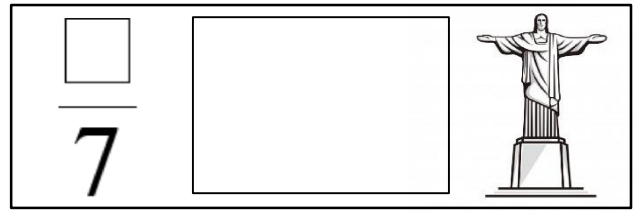




G.3 Coordinate Geometry



1. If $A(-3, 5)$ and $B(2, -1)$, what is the slope of \overline{AB} ?

- a. $-\frac{6}{5}$ b. $-\frac{5}{6}$
 c. $\frac{6}{5}$ d. $\frac{5}{6}$

2. The equation $(x + 4)^2 + (y - 1)^2 = r^2$ represents circle C.

The center of circle C is at $(-4, 1)$. The point $D(4, -5)$ lies on the circle. What is r , the length of the radius of circle C?

- a. 100 b. 10 c. 14 d. 12

3. Line r has a slope of $\frac{1}{2}$. Which of the following pairs of points define a line perpendicular to line r ?

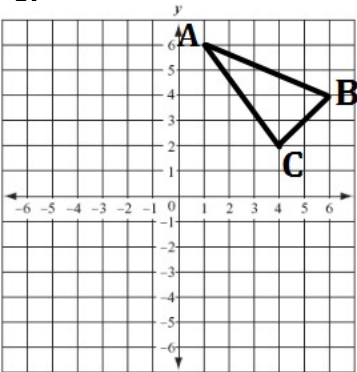
- A. $(5, -2)$ and $(3, 0)$ B. $(1, 7)$ and $(4, 1)$
 C. $(-2, 0)$ and $(5, -6)$ D. $(-8, -2)$ and $(6, 5)$

4. Given: $A(-2, 3)$ and $B(5, -5)$.

What are the coordinates of the midpoint of \overline{AB} ?

- A. $(-4, 3.5)$ B. $(1.5, -1)$
 C. $(2, -1)$ D. $(0.5, -1)$

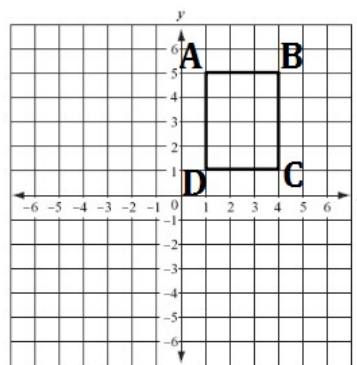
5.



Triangle ABC is reflected across the line $y=x$ to create triangle $A'B'C'$. What are the coordinates of A' ?

- A. $(1, -6)$ B. $(-1, -6)$
 C. $(-1, 6)$ D. $(6, 1)$

6.



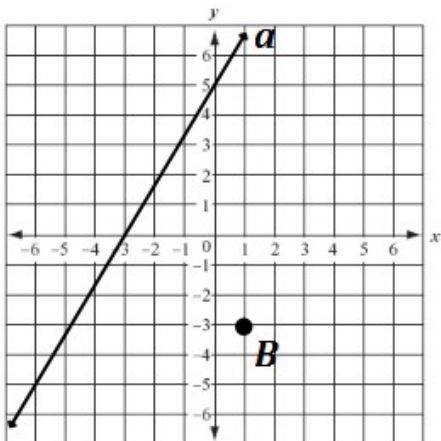
Which defines a line of symmetry for quadrilateral ABCD?

- A. $y = 2$
 B. $x = 2$
 C. $y = 3$
 D. $x = 3$

7. Directions: Plot the point on the grid.

Line a passes through $(-6, -5)$ and $(0, 5)$.

Plot a point other than point B with integral coordinates that is on a line parallel to a and passes through point B .



BONUS According to the information provided in the diagram below, which statement is true?

- a. $a \parallel b$ only
 b. $c \parallel d$ only
 c. $a \parallel b$ and $c \parallel d$
 d. No lines are para

