



Solve coordinate geometry problems involving lines and circles

1

What does the variable 'k' signify in this formula?

$$(x - h)^2 + (y - k)^2 = r^2$$
$$k = ?$$

- A The radius of the circle
- B The y-coordinate of the center

3

What would the center coordinate of this circle graph be?

$$(x + 4)^2 + (y - 5)^2 = 1^2$$

- A $C = (5, -4)$
- B $C = (-4, 5)$
- C $C = (-4, 1)$

4

Which equation would have this radius?

$$r = 3$$

- A $(x - 5)^2 + (y + 1)^2 = 3^2$
- B $(x - 3)^2 + (y + 1)^2 = 10^2$

6

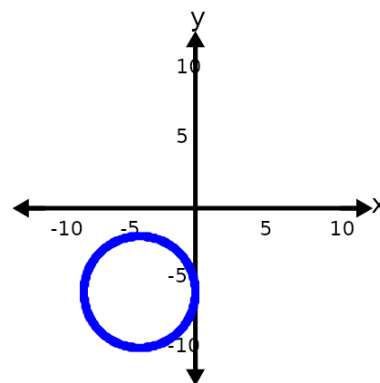
Which equation would have this center coordinate and radius?

$$C = (-5, 3)$$
$$r = 4$$

- A $(x + 5)^2 + (y - 3)^2 = 4^2$
- B $(x + 5)^2 + (y + 3)^2 = 4^2$

2

Which center coordinate is correct for this graph?



- A $C = (-6, -4)$
- B $C = (-4, -6)$
- C $C = (-4, 4)$

5

Which equation would have this center coordinate?

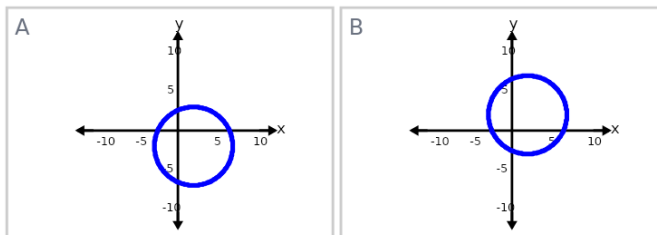
$$C = (4, 2)$$

- A $(x - 4)^2 + (y + 2)^2 = 1^2$
- B $(x - 4)^2 + (y - 2)^2 = 1^2$

7

Which graph shows this correctly?

$$(x - 2)^2 + (y + 2)^2 = 5^2$$



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Find the intersection point of these two lines

$$y = 4x + 1$$

$$x = -3$$

A	$(-3, -16)$	B	$(1, -13)$
C	$(-3, -10)$	D	$(-7, -13)$
E	$(-3, -11)$	F	$(0, -16)$

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Find the intersection point of these two lines

$$y = -3x - 2$$

$$x = -6$$

A	$(-6, 16)$	B	$(-6, 14)$
C	$(-6, 12)$	D	$(-6, 18)$
E	$(-6, 17)$	F	$(-10, 16)$

10

Find the intersection point of these two lines

$$y = -1x + 8$$

$$y = -6$$

A	$(15, -6)$	B	$(12, -7)$
C	$(14, -6)$	D	$(14, -8)$
E	$(16, -6)$	F	$(17, -4)$

11

Find the intersection point of these two lines

$$y = -4x + 1$$

$$y = -1$$

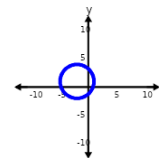
A	$(3.5, -6)$	B	$(-3.5, -1)$
C	$(1.5, -3)$	D	$(-0.5, -1)$
E	$(2.5, -3)$	F	$(0.5, -1)$

12Is the equation for the perpendicular bisector of segment AB equal to: $y = 1x + 3$ Point A : $(1, 8)$ Point B : $(3, 6)$

A		B	
Yes		No	

13

Which equation would create this graph?



A	$(x + 2)^2 + (y - 1)^2 = 8^2$
B	$(x + 2)^2 + (y - 1)^2 = 3^2$

14

Find the intersection point of these two lines

$$y = -4x + 3$$

$$y = -1x + 6$$

A	$(2, 11)$	B	$(-3, 4)$
C	$(-1, 7)$	D	$(-1, 5)$
E	$(0, 11)$	F	$(-4, 6)$

15

Find the intersection point of these two lines

$$y = -4x + 8$$

$$y = 4x - 1$$

A	$(-3.88, 2.5)$	B	$(1.13, 3.5)$
C	$(0.13, 3.5)$	D	$(-1.88, 7.5)$
E	$(-3.88, -0.5)$	F	$(-3.88, 1.5)$