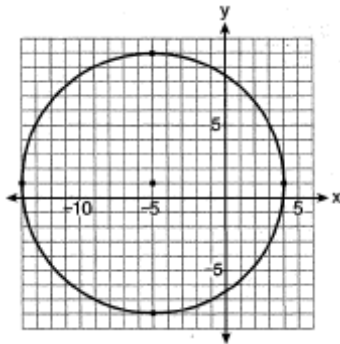


NAME: _____

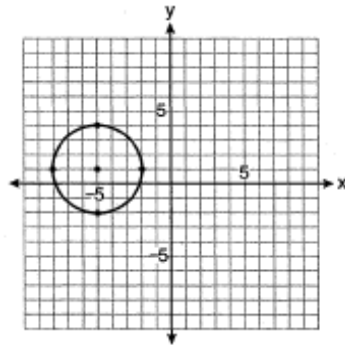
1. 060920ge, P.I. G.G.74

Which graph represents a circle with the equation $(x - 5)^2 + (y + 1)^2 = 9$?

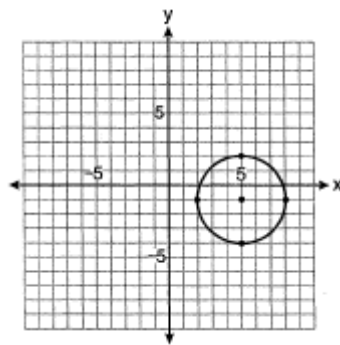
[A]



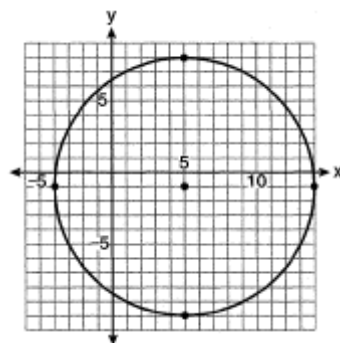
[B]



[C]



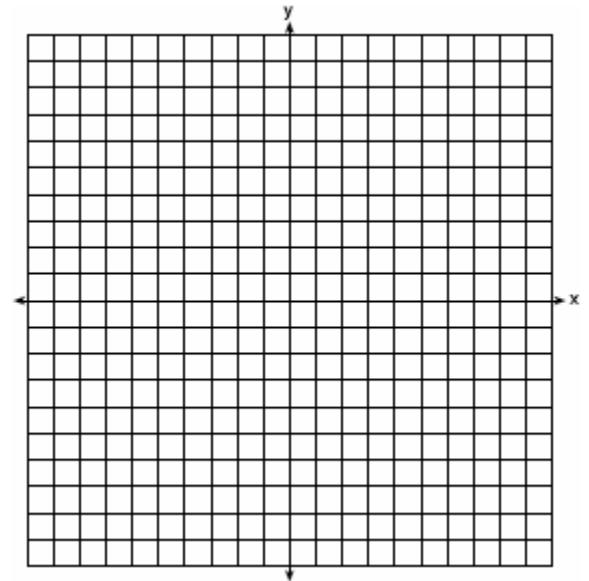
[D]



2. 010133a, P.I. G.G.74

John uses the equation $x^2 + y^2 = 9$ to represent the shape of a garden on graph paper.

a Graph $x^2 + y^2 = 9$ on the accompanying grid.

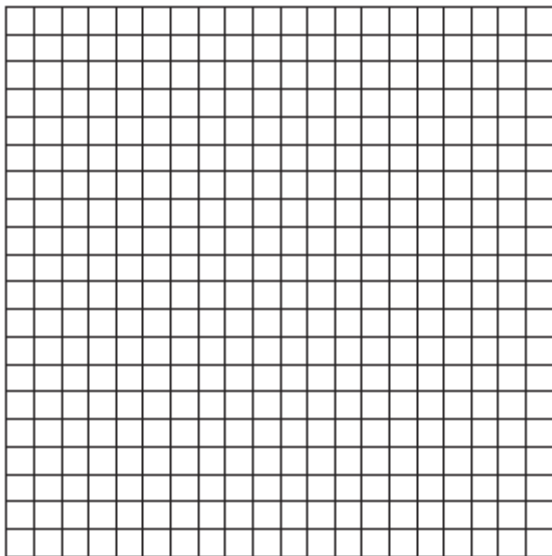


b What is the area of the garden to the nearest square unit?

NAME: _____

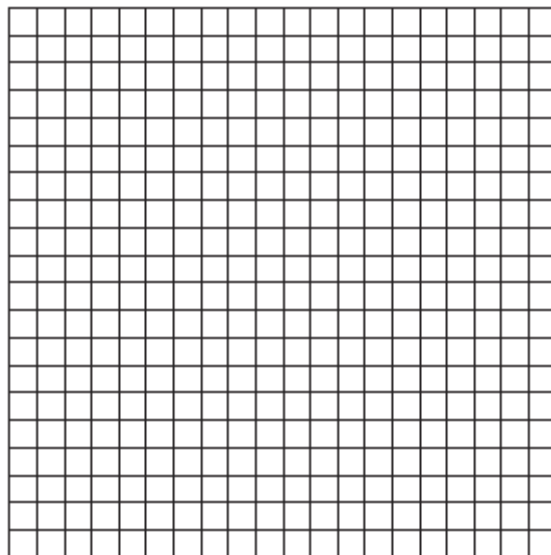
3. 080230a

On the accompanying grid, graph a circle whose center is at $(0,0)$ and whose radius is 5. Determine if the point $(5,-2)$ lies on the circle.



5. 010633a

In a circle whose center is $(2,3)$, one endpoint of a diameter is $(-1,5)$. Find the coordinates of the other endpoint of that diameter. [The use of the accompanying grid is optional.]



4. 010625a

Which point is on the circle whose equation is $x^2 + y^2 = 289$?

- [A] $(8,-15)$ [B] $(-1,-16)$
 [C] $(7,-10)$ [D] $(-12,12)$

6. 010208a

What is the greatest possible number of points of intersection of a triangle and a circle?

- [A] 4 [B] 6 [C] 2 [D] 3

[1] C _____

a [2] The student draws a circle with its center at (0,0) and a radius of 3.

[1] The student draws a circle, but it has an incorrect center or radius.

b [2] 28, and appropriate work or the expression 9π is shown, which rounds to 28.

or [2] An appropriate area is shown for the incorrect figure in part a.

[1] The correct expression is shown, but the answer is left as 9π , not rounded, or not rounded correctly.

or [1] An incorrect radius is used, but the area is rounded appropriately.

a and b [0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an

[2] obviously incorrect procedure.

[3] The circle is graphed correctly, and appropriate work shows that (5,-2) does not lie on the circle.

[2] The circle is graphed correctly, but the work fails to show that (5,-2) does not lie on the circle.

[1] The circle is graphed incorrectly, but the location of (5,-2) is determined appropriately, based on the incorrect graph.

[0] Yes or no, but no work is shown.

or [0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an

[3] obviously incorrect procedure.

[4] A _____

[2] (5,1), and appropriate work is shown, such as a graph using the slope or $2 = \frac{x-1}{2}$ and

$$3 = \frac{y+5}{2}.$$

[1] Both (2,3) and (-1,5) are plotted correctly, but one graphing error is made in finding the other endpoint.

or [1] Appropriate work is shown, but one conceptual error is made.

or [1] Appropriate work is shown, but only $x = 5$ or $y = 1$ is found.

or [1] Appropriate work is shown, and the correct endpoint is designated, but the coordinates are not stated.

or [1] (5,1), but no work is shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[5] incorrect procedure.

[6] B _____