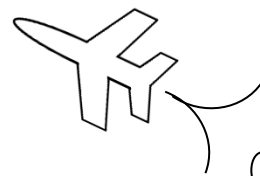


MAth on the Fly!



NAME: _____ DATE: _____

Equations of Circles

Find the center and radius of each circle below.

1. $(x - 6)^2 + (y + 8)^2 = 25$

2. $x^2 + (y + 4)^2 = 81$

3. $x^2 + y^2 = 49$

4. $(x + 5)^2 + (y + 6)^2 = 20$

5. $(x + 9)^2 + (y - 7)^2 = 16$

6. $(x - 10)^2 + y^2 = 1$

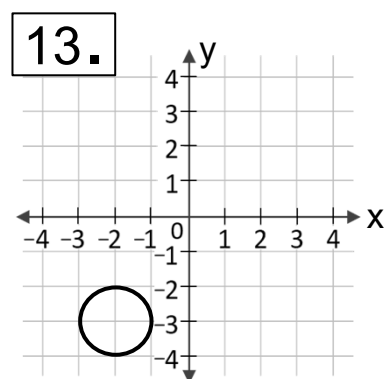
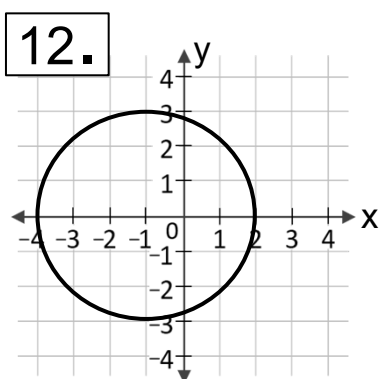
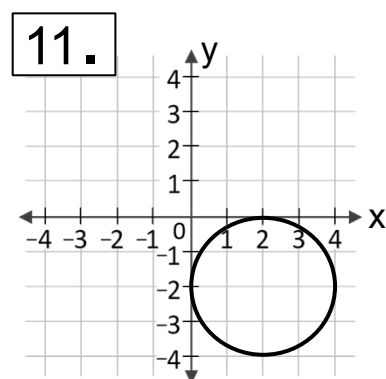
Find the equation of each circle.

7. Center = (1,9), Radius = 6

8. Center = (0,0), Radius = 10

9. Center = (0,-8), Radius = 8

10. Center = (-4,3), Radius = $\sqrt{5}$



SOLUTIONS

1.

Center = $(6, -8)$

Radius = $\sqrt{25} = 5$

2.

Center = $(0, -4)$

Radius = $\sqrt{81} = 9$

3.

Center = $(0, 0)$

Radius = $\sqrt{49} = 7$

4.

Center = $(-5, -6)$

Radius = $\sqrt{20} \approx 4.47$

5.

Center = $(-9, 7)$

Radius = $\sqrt{16} = 4$

6.

Center = $(10, 0)$

Radius = $\sqrt{1} = 1$

7.

$$(x - 1)^2 + (y - 9)^2 = 36$$

8.

$$x^2 + y^2 = 100$$

9.

$$x^2 + (y + 8)^2 = 64$$

10.

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

11.

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

12.

$$(x + 1)^2 + y^2 = 9$$

13.

$$(x + 2)^2 + (y + 3)^2 = 1$$