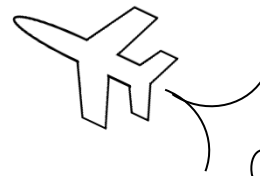


# MAth on the Fly!



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

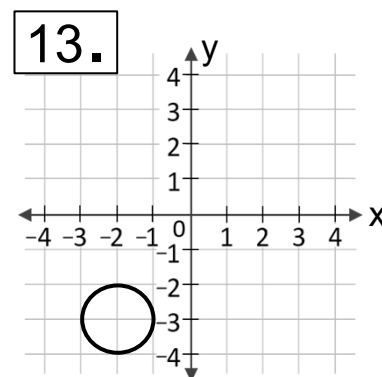
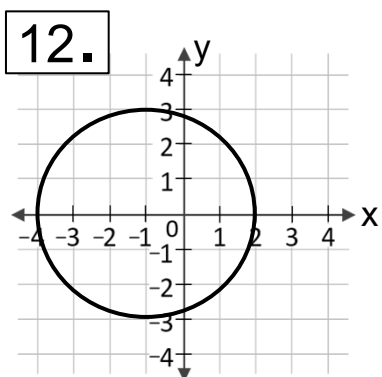
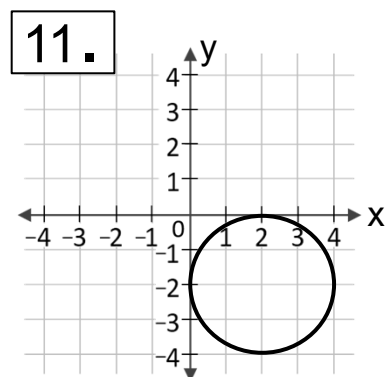
Find the equation of each circle.

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