

Graphing Circles with Center (h,k) Equation of a Circle with center (h,k) h gives the x -coordinate of the center k gives the y -coordinate of the center

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

 r gives the radius of the circleEquation of a Circle with center (h,k)

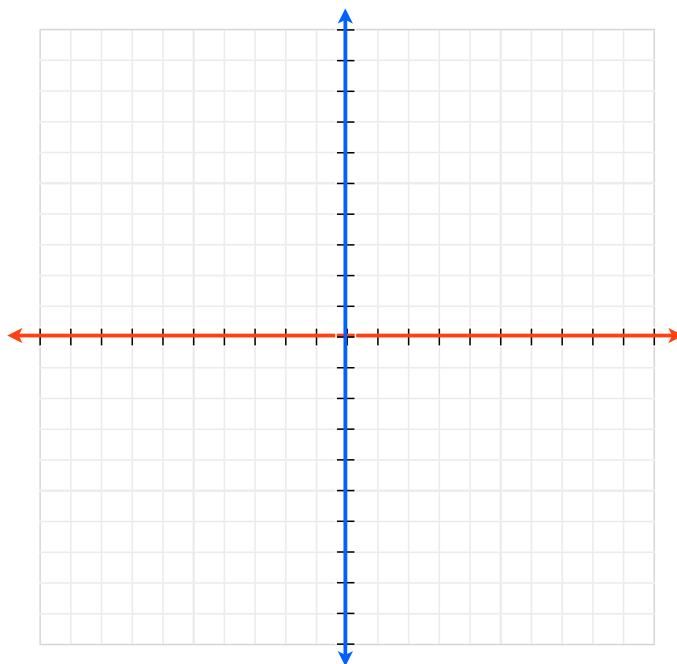
$$(x - h)^2 + (y - k)^2 = r^2$$

Given the equation of a circle, label h , k , and r .

$$(x - 3)^2 + (y + 2)^2 = 16 \quad (x + 1)^2 + y^2 = 64 \quad (x + 5)^2 + (y - 4)^2 = 12 \quad x^2 + (y - 1)^2 = 48$$

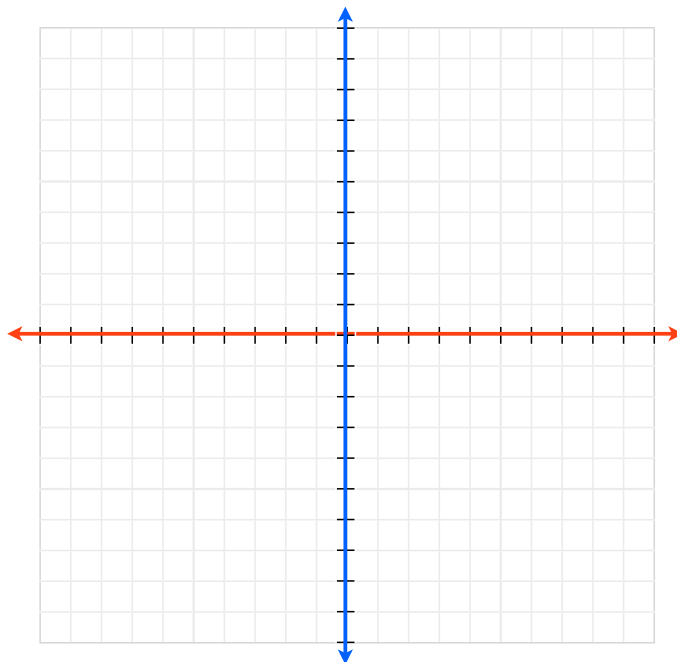
Graph the following circle

$$(x - 2)^2 + (y + 3)^2 = 25$$



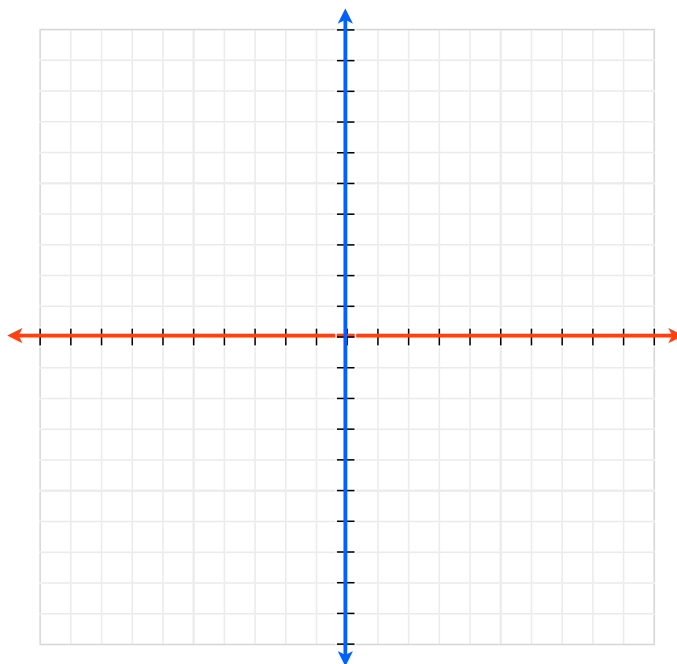
Graph the following circle

$$(x - 1)^2 + (y + 1)^2 = 81$$



Graph the following circle

$$3(x + 3)^2 + 3(y + 5)^2 = 48$$



Write the equation of a circle with following centers and radii.

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

Center = (7, -3)

Radius = 3

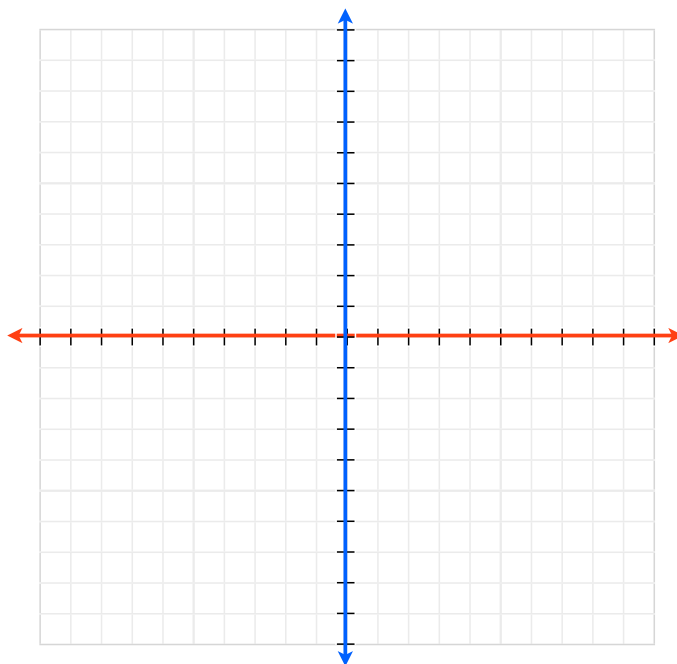
Center = (2, 0)

Radius = 8

Center = (-1, 5)

Radius = $3\sqrt{2}$

Write the equation of a circle with center at $(-2, -1)$ that passes through point $(2, 2)$.



Equation of a Circle with center (h, k)

h gives the x -coordinate of the center

k gives the y -coordinate of the center

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

r gives the radius of the circle