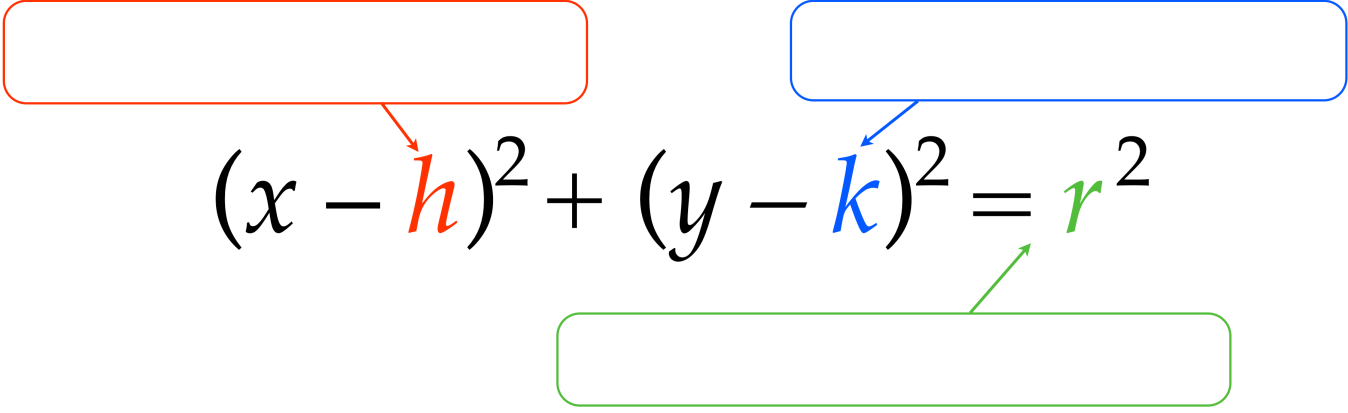


Determining the Equation of a Circle

Name _____

Date _____ Period _____

Equation of a **Circle**
with center (h,k)



The diagram shows the equation $(x - h)^2 + (y - k)^2 = r^2$. A red box is positioned above the h with an arrow pointing to it. A blue box is positioned above the k with an arrow pointing to it. A green box is positioned below the r with an arrow pointing to it.

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

Write the equation of a **circle** with the following characteristics

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

Center = $(0,0)$

Radius = 7

Center = $(2,-4)$

Radius = 9

Center = $(0,0)$

Radius = 2

Center = $(0,-8)$

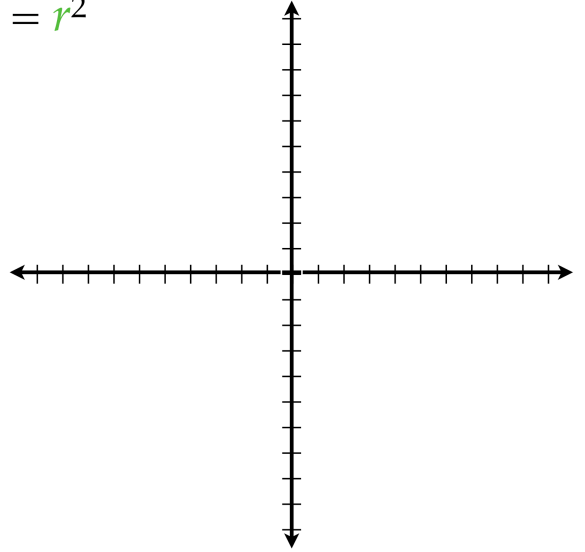
Radius = 6

Write the equation of a circle with the following characteristics

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

Center = (0,0)

Through Point = (6,8)

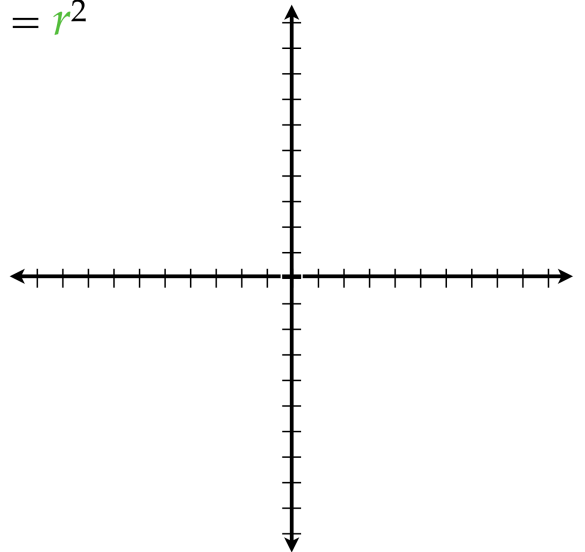


Write the equation of a circle with the following characteristics

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

Center = (-5,-4)

Through Point = (-1,-1)



Write the equation of a circle with the following characteristics

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

Center = $(-6, 3)$

Tangent to y -axis

