

Unit 6.5

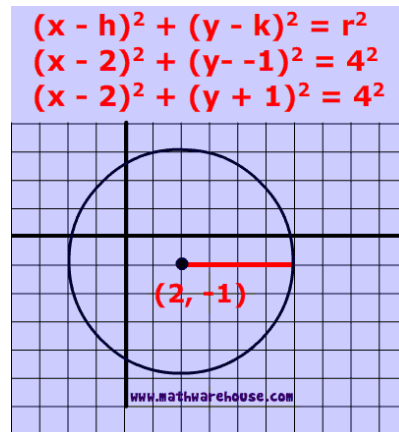
Equations of Circles

Equations of circle:

The standard equation of a circle with radius r and center (h, k) .

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

An example is shown at the right:



Given center of circle and point on circle, find radius

Use distance between two points formula:

$$\text{distance (radius)} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$