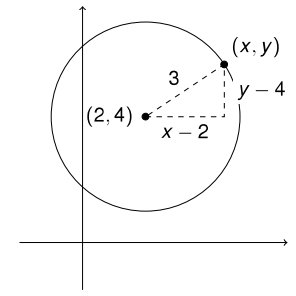


The Equation of a Circle



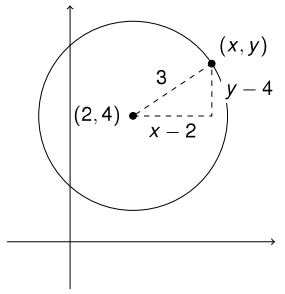
- Preliminaries
- Pythagorean Theorem

- Objectives
- Write the equation of a circle from a geometric description



Example 1

Recap



Find the equation of a circle with center at  $(h, k)$  and radius  $r$

**Equation of a Circle**

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

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