

## The Equation of a Circle



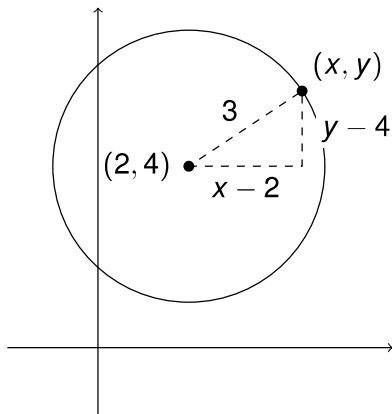
### Preliminaries

- Pythagorean Theorem

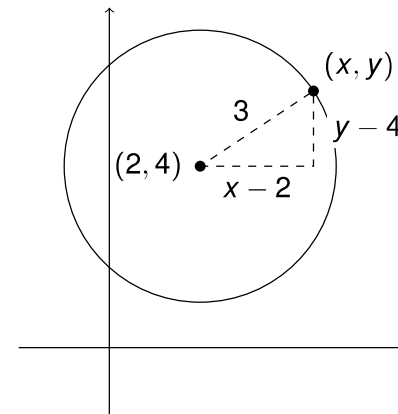
### Objectives

- Write the equation of a circle from a geometric description

### Example 1



### Example 1



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

## Recap

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

### Equation of a Circle

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