

# The Equation of a Circle



# Preliminaries and Objectives

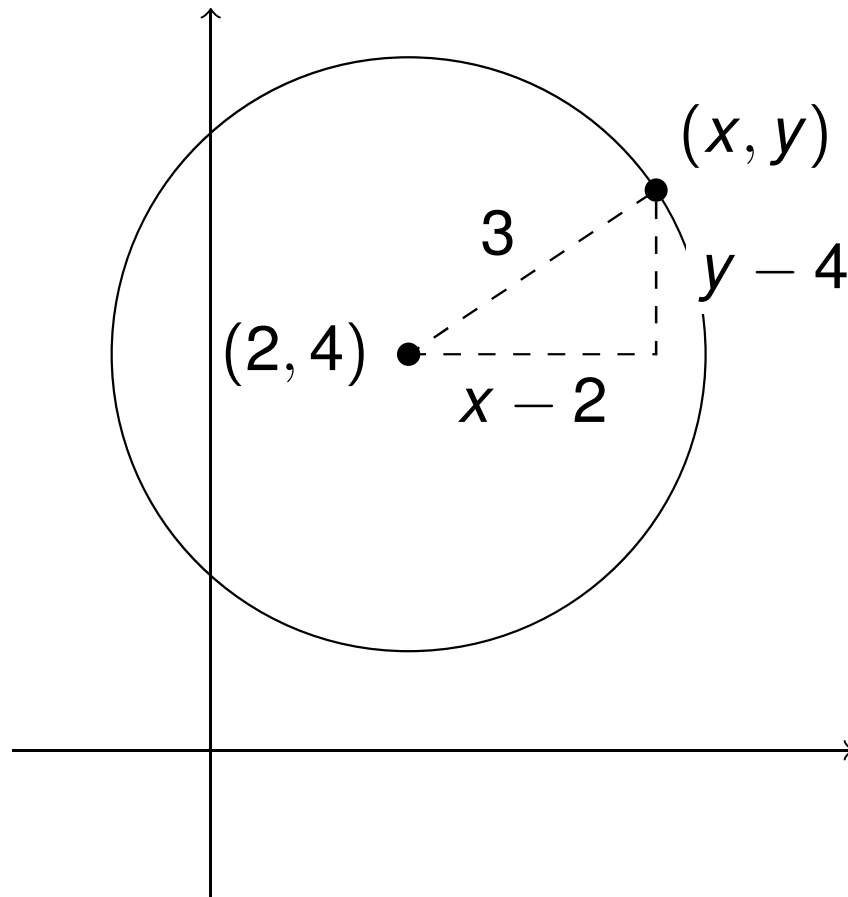
## Preliminaries

- Pythagorean Theorem

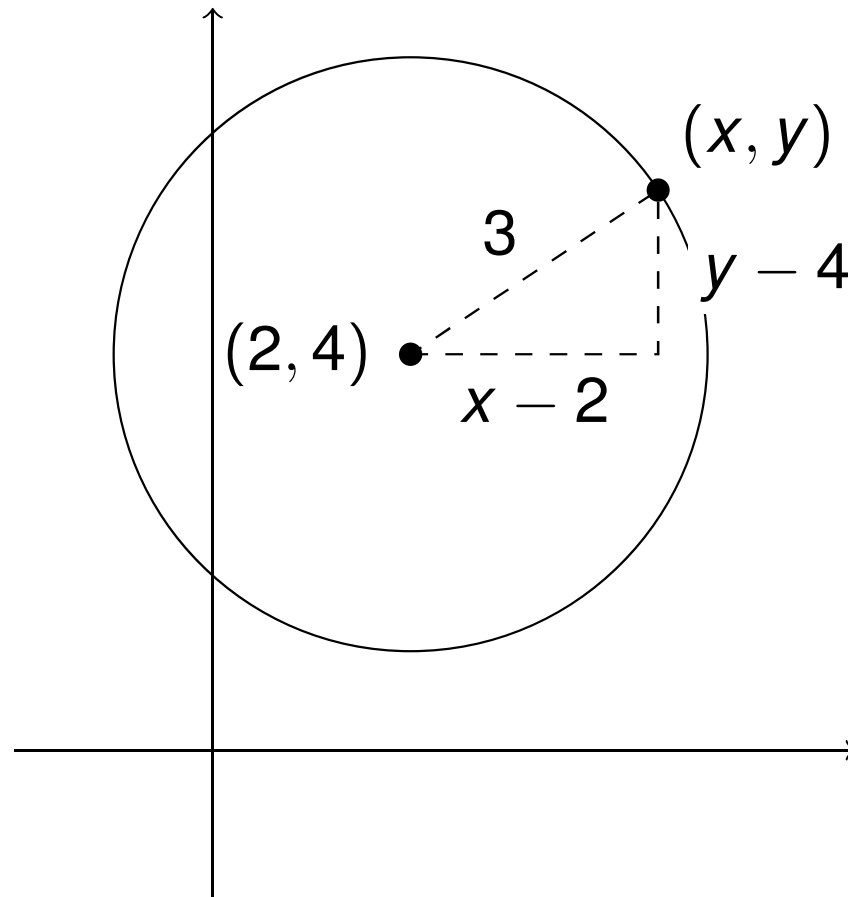
## Objectives

- 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

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