**The Equation of a Circle**

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**Preliminaries**
- Pythagorean Theorem

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

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**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**

\[(x - h)^2 + (y - k)^2 = r^2\]