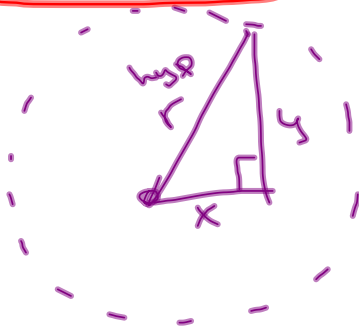


hw p 583  
p 522



# Circles

$$x^2 + y^2 = r^2$$

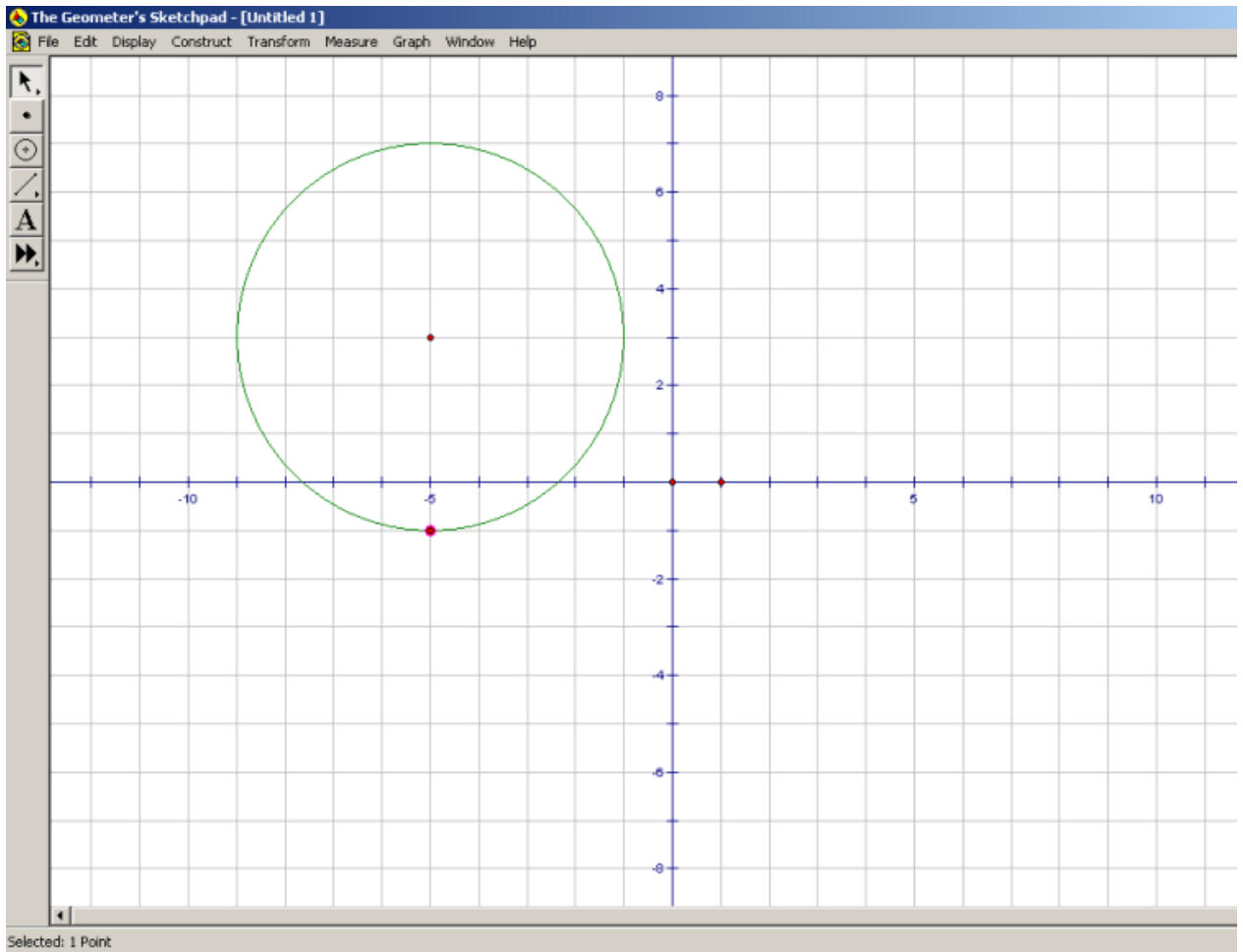
centered at 0,0

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

centered at h,k



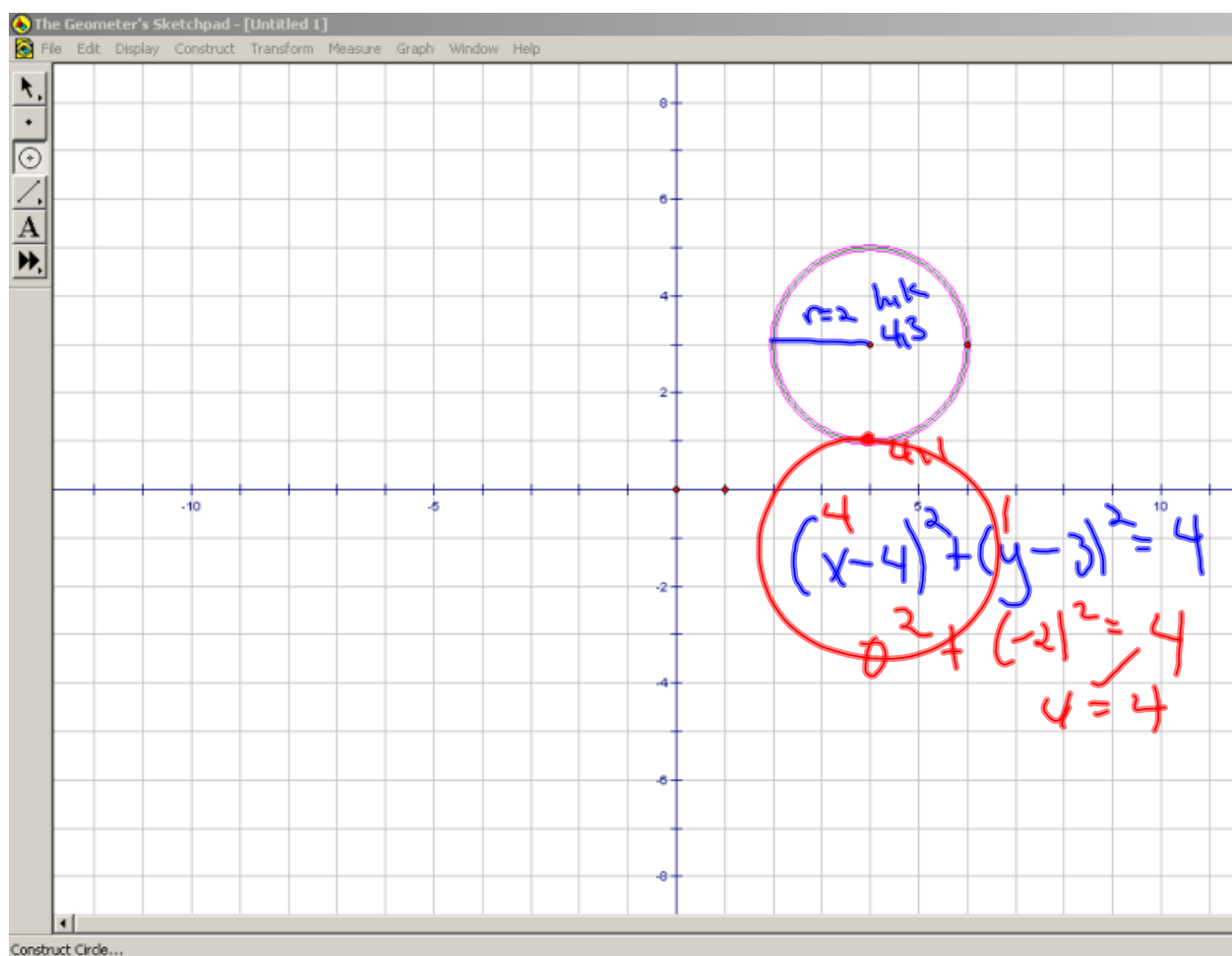
STANDARD FORM



The Geometer's Sketchpad - [Untitled 1]  
File Edit Display Construct Transform Measure Graph Window Help

Write the equation in standard form.

$(x - (-5))^2 + (y - 3)^2 = 4^2$   
 $(x + 5)^2 + (y - 3)^2 = 16$   
 $4^2 + 0^2 = 16$   
 $x^2 + 10x + 25 + y^2 - 6y + 9 =$



The Geometer's Sketchpad - [Untitled 1]  
 File Edit Display Construct Transform Measure Graph Window Help

Write the equation in standard form.

$(x - (-5))^2 + (y - 3)^2 = 4^2$   
 $(x + 5)^2 + (y - 3)^2 = 16$   
 $4^2 + 0^2 = 16$

Selected: 1 Point

Please graph the following circle.

- ① Label the center
- ② Label the vertices.

$$\begin{aligned} \textcircled{\ast} (x+1)^2 + (y+4)^2 &= 16 \\ (x-(-1))^2 + (y-(-4))^2 &= 4^2 \\ h, k &= -1, -4 \\ r &= 4 \end{aligned}$$

