

4-24-14

1st Geo

Equations of Circles

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

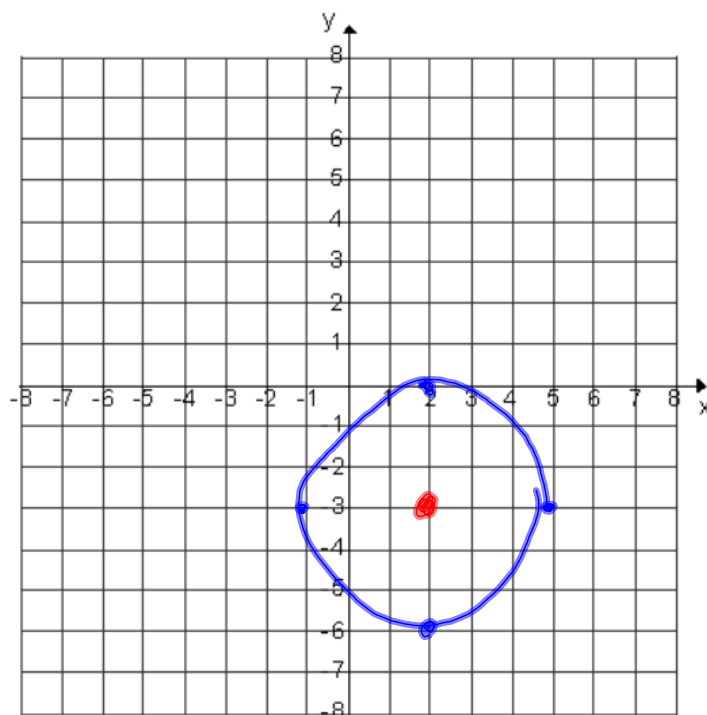
Center = (h, k)

radius = r

① $(x-2)^2 + (y+3)^2 = 9$

center = $(2, -3)$

radius = 3



$$\textcircled{2} \quad (x+8)^2 + (y-1)^2 = 25$$

center = $(-8, 1)$
radius = 5

$$\textcircled{3} \quad (x-1)^2 + (y+1)^2 = 100$$

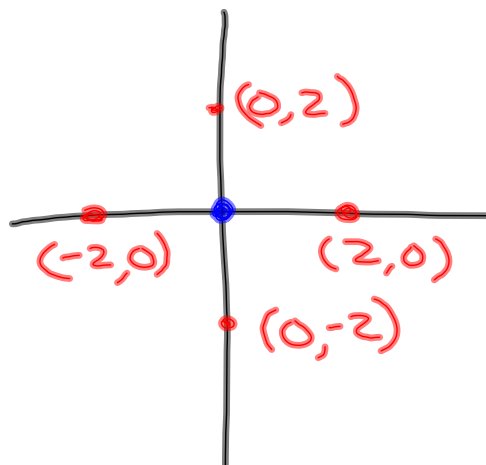
center = $(1, -1)$
radius = 10

$$\textcircled{4} \quad (x+8)^2 + y^2 = 64$$

center = $(-8, 0)$
radius = 8

$$\textcircled{5} \quad x^2 + y^2 = 4$$

center = $(0, 0)$
radius = 2



Give me the equation of the circle given:

⑥ center = $(2, -8)$ radius = 3
 $(x-2)^2 + (y+8)^2 = 9$

⑦ center = $(-1, 10)$ radius = 4
 $(x+1)^2 + (y-10)^2 = 16$

⑧ center = $(0, -5)$ radius = 1
 $x^2 + (y+5)^2 = 1$

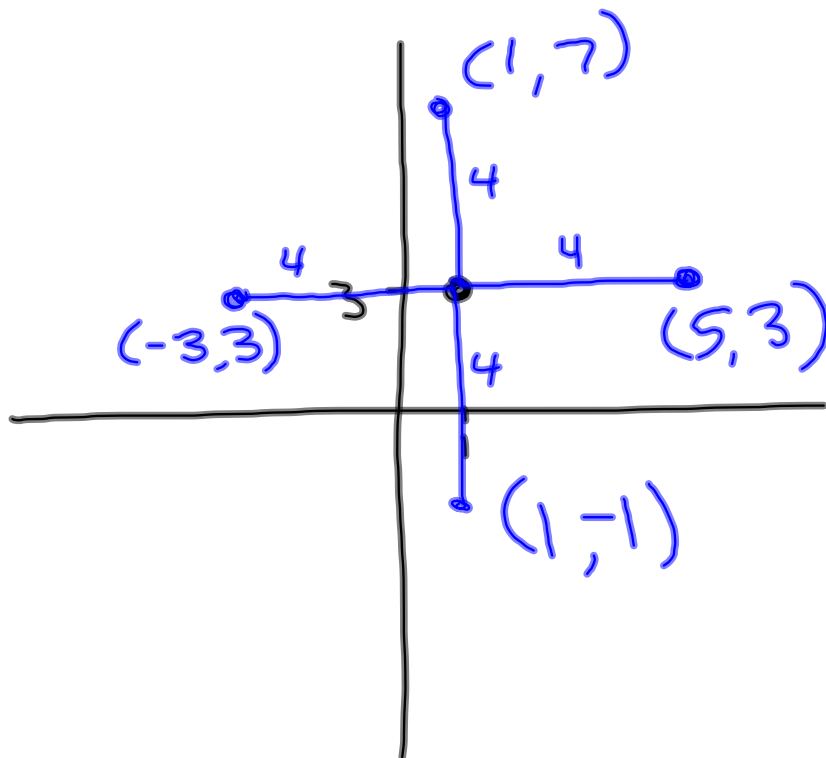
⑨ center = $(-4, 0)$ radius = 9
 $(x+4)^2 + y^2 = 81$

⑩ Give me a point on the circle

$$(x-1)^2 + (y-3)^2 = 16$$

$$\text{center} = (1, 3)$$

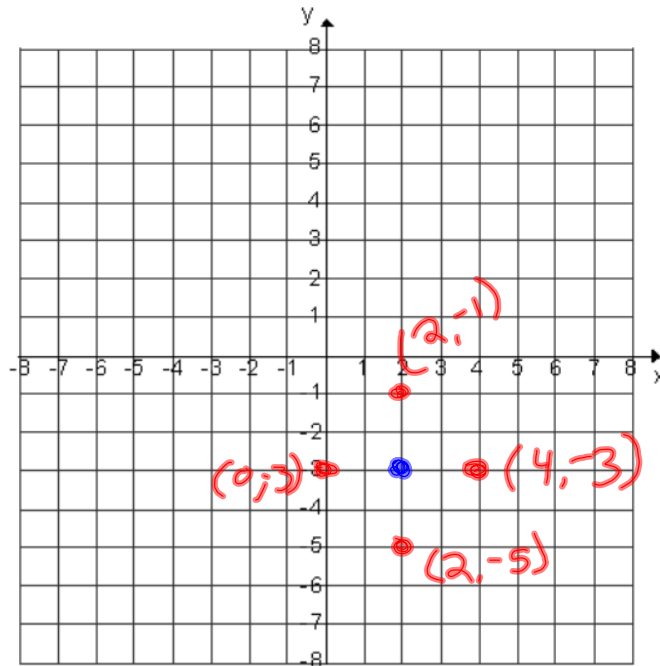
$$\text{radius} = 4$$



Give me all 4 points
on $(x-2)^2 + (y+3)^2 = 4$

center = $(2, -3)$

radius = 2



center = $(3, -10)$

radius = 6

$(9, -10)$ $(-3, -10)$

$(3, -4)$ $(3, -16)$