

February 15, 2016

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

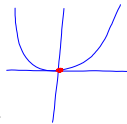
Center: (h, k)
 (x, y)
 $(\text{Hor}, \text{Vert})$

$$r^2 = 183$$

$$r = \sqrt{183}$$

$$\left(\sqrt{183}\right)^2 = \sqrt{183} \cdot \sqrt{183} = 183$$

Feb 15-10:55 AM

$$f(x) = x^2$$


$$f(x) = (x-h)^2$$

$$g(x) = (x-2)^2$$

$$h(x) = (x+2)^2$$

x	g(x)
0	4
1	1
2	0
-2	16
-1	9

Feb 15-11:01 AM

$$(x-5)^2 + (y+2)^2 = 5$$

$C = (5, -2)$

$$r = \sqrt{5}$$

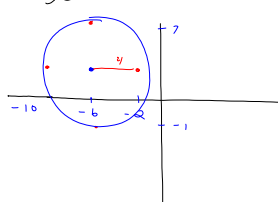
$$\sqrt{r^2} = 5$$

$$r = \pm \sqrt{5}$$

Feb 15-11:15 AM

$C = (-4, 3)$

$r = 4$



Feb 15-11:19 AM

#1) $8x + x^2 - 2y = 64 - y^2$

$$\boxed{x^2 + 8x} + \boxed{y^2 - 2y} = 64$$

$8 \cdot \frac{1}{2} = 4$
 $4^2 = 16$

$-2 \cdot \frac{1}{2} = -1$
 $(-1)^2 = 1$

$$\boxed{x^2 + 8x + 16} + \boxed{y^2 - 2y + 1} = 64 + 16 + 1$$

$$(x+4)^2 + (y-1)^2 = 81$$

$C = (-4, 1)$

$r = 9$

Feb 15-11:22 AM