Graph in vertex form. Verify with your preferred method of graphing! \odot

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

$$y = (x+5)^2 - 9$$

Vertex Form Work

X-intercepts: What two x values make y=0?

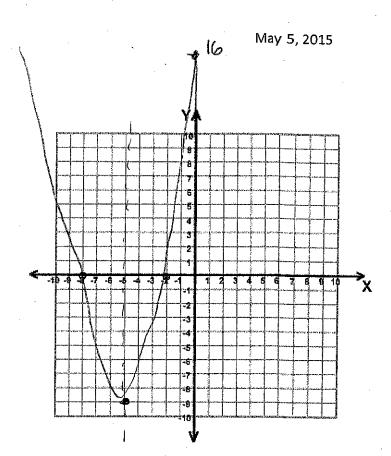
$$(X+5)^2-9=0$$

$$x=-2$$
 $x=-8$

Y-intercept: when x=0

$$(0+5)^2-9$$

25-9=16



Vertex Point: (h,k) *Take opposite of h value. Take k coordinate.

$$(-5, -9)$$

Verify with your favorite method of graphing! ^③

Graph in vertex form. Verify with your preferred method of graphing! ◎

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

$$y = (x+6)^2 - 4$$

Vertex Form Work

X-intercepts: What two x values make y=0?

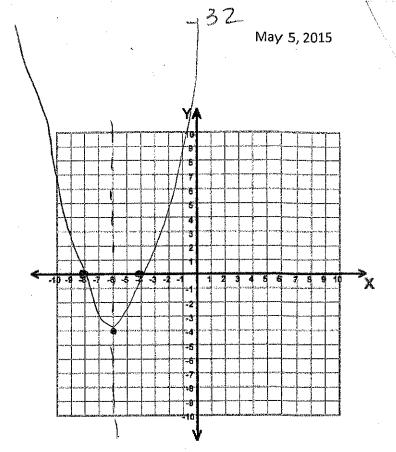
$$(x+6)^2-4=0$$

Y-intercept: when x=0

$$(0+6)^2 - 4$$
$$36 - 4 = 32$$

Vertex Point: (h,k) *Take opposite of h value. Take k coordinate.

Verify with your favorite method of graphing! ©



Graph in vertex form. Verify with your preferred method of graphing! ©

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

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

Vertex Form Work

X-intercepts: What two x values make y=0?

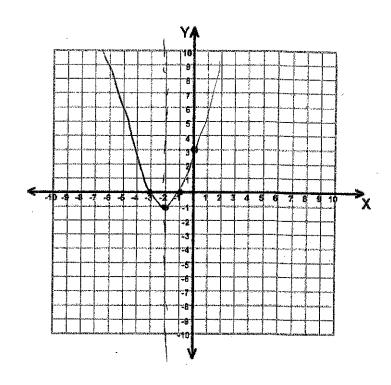
$$(x+2)^2-1=0$$

$$x = -3 \quad x = -1$$

Y-intercept: when x=0

$$(0+2)^2-1$$

 $4-1=3$



Vertex Point: (h,k) *Take opposite of h value. Take k coordinate.

$$(-2,-1)$$

Verify with your favorite method of graphing! ©

Graph in vertex form. Verify with your preferred method of graphing! ⁽¹⁾

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

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

Vertex Form Work

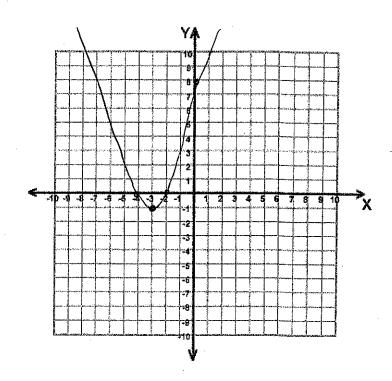
X-intercepts: What two x values make y=0?

$$(x+3)^2-1$$

Y-intercept: when x=0

$$(0+3)^2-1$$

 $9-1=8$



Vertex Point: (h,k) *Take opposite of h value. Take k coordinate.

$$(-3,-1)$$

Verify with your favorite method of graphing! ©