

1. Identify the indicated information for each of the following.

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

opens: up    down \_\_\_\_\_

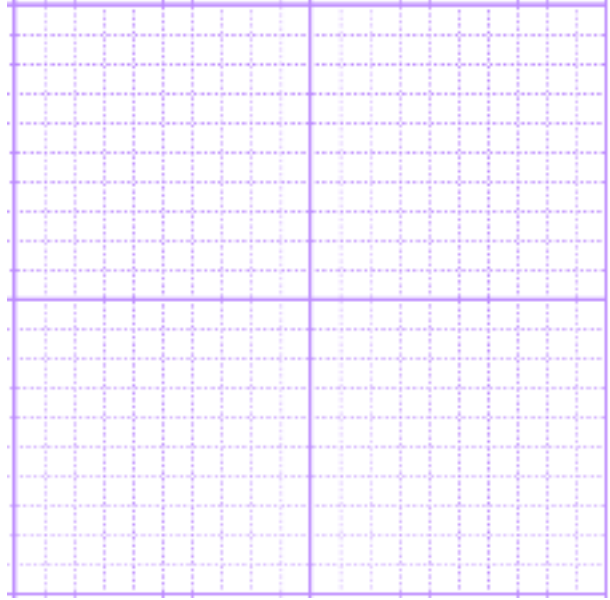
vertex ( x , y )    max    min \_\_\_\_\_

obtuse    acute    standard \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



2. Identify the indicated information for each of the following.

$$y = -\frac{1}{3}(x - 1)^2 + 7$$

opens: up    down \_\_\_\_\_

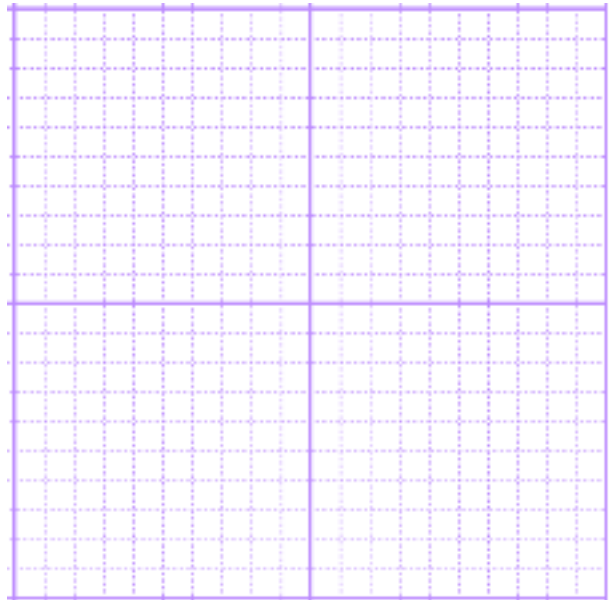
vertex ( x , y )    max    min \_\_\_\_\_

obtuse    acute    standard \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



3. Identify the indicated information for each of the following.

$$y = \frac{1}{2}(x - 3)^2 - 6$$

opens: up    down \_\_\_\_\_

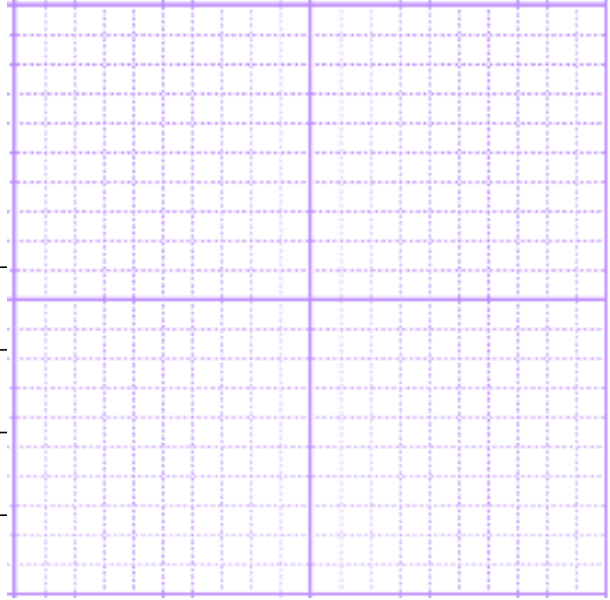
vertex ( x , y )    max    min \_\_\_\_\_

obtuse    acute    standard \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



4. Identify the indicated information for each of the following.

$$y = \frac{1}{4}(x + 2)^2 - 8$$

opens: up    down \_\_\_\_\_

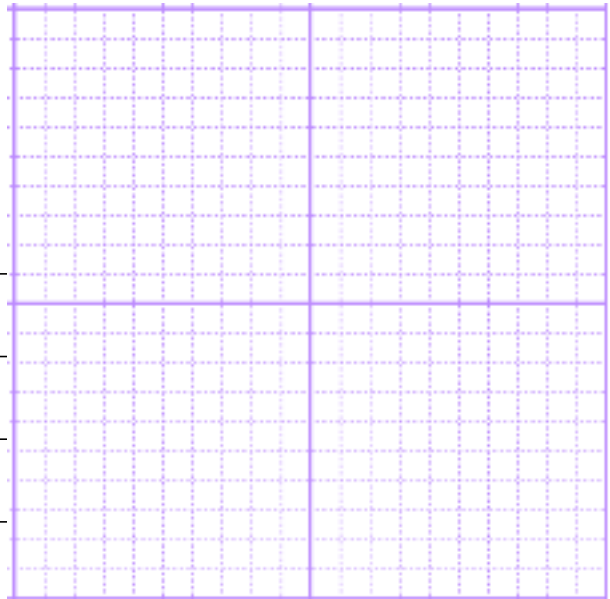
vertex ( x , y )    max    min \_\_\_\_\_

obtuse    acute    standard \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



Completing the Square

Put each equation in the "graphing form"

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

5.  $y = -\frac{1}{4}x^2 - 3x - 7$

7.  $y = \frac{1}{3}x^2 + 2x - 6$

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

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

opens: up    down    \_\_\_\_\_

opens: up    down    \_\_\_\_\_

vertex ( x , y )    max    min    \_\_\_\_\_

vertex ( x , y )    max    min    \_\_\_\_\_

obtuse    acute    standard    \_\_\_\_\_

obtuse    acute    standard    \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

6.  $y = 5x^2 + 40x + 22$

8.  $y = 6x^2 + 24x + 19$

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

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

opens: up    down    \_\_\_\_\_

opens: up    down    \_\_\_\_\_

vertex ( x , y )    max    min    \_\_\_\_\_

vertex ( x , y )    max    min    \_\_\_\_\_

obtuse    acute    standard    \_\_\_\_\_

obtuse    acute    standard    \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

$\Delta x =$  \_\_\_\_\_

Graphing “sideways” parabolas

9.  $x = \frac{-1}{2}y^2 - 3y + 4\frac{1}{2}$

opens: right left \_\_\_\_\_

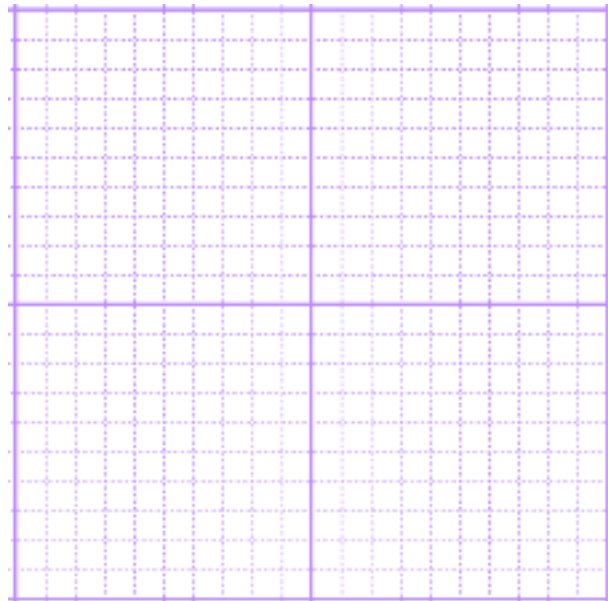
vertex ( x , y ) max min \_\_\_\_\_

obtuse acute standard \_\_\_\_\_

$\Delta y =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



10.  $x = -2y^2 - 8y + 5$

opens: right left \_\_\_\_\_

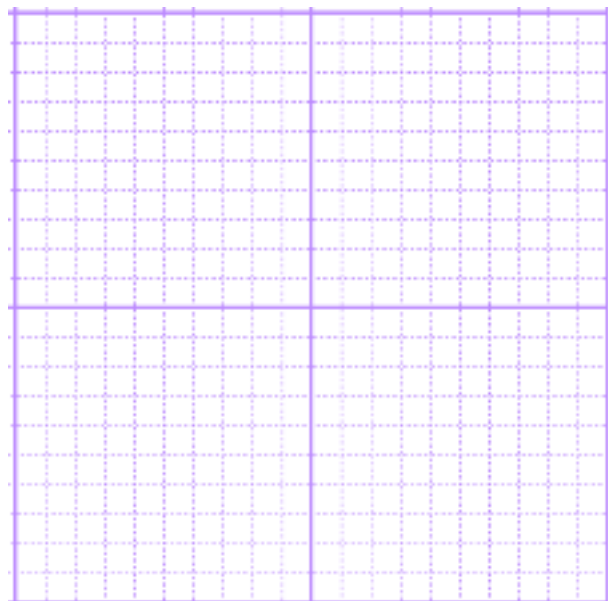
vertex ( x , y ) max min \_\_\_\_\_

obtuse acute standard \_\_\_\_\_

$\Delta y =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



11.  $x = -y^2 + 6y - 5$

opens: right left \_\_\_\_\_

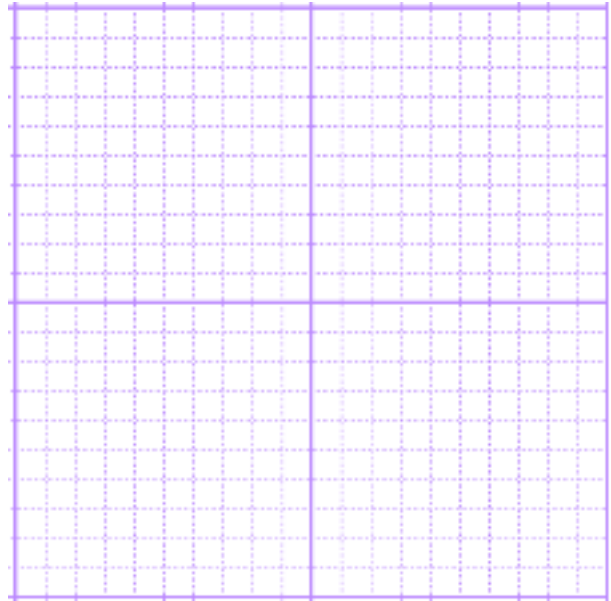
vertex ( x , y ) max min \_\_\_\_\_

obtuse acute standard \_\_\_\_\_

$\Delta y =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



12.  $x = \frac{1}{2}y^2 - y - 7$

opens: right left \_\_\_\_\_

vertex ( x , y ) max min \_\_\_\_\_

obtuse acute standard \_\_\_\_\_

$\Delta y =$  \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

