

Identify the key features of the given function:

1. $y = -2(x + 7)^2 + 2$

Parent Function: _____

Transformation: _____

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

Positive: _____

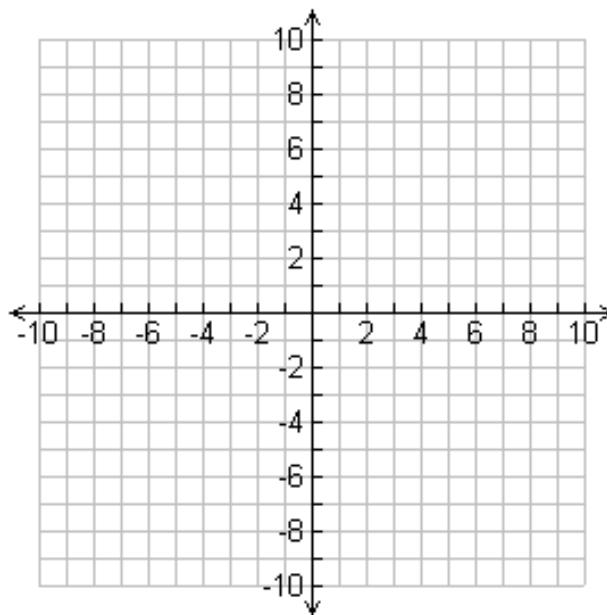
Negative: _____

Maximum: _____ Absolute or Relative

Minimum: _____ Absolute or Relative

X-intercept(s): _____

Is the graph a function: YES or NO



2. $y = \frac{1}{2} \left| \frac{1}{2}x + 1 \right| - 2$

Parent Function: _____

Transformation: _____

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

Positive: _____

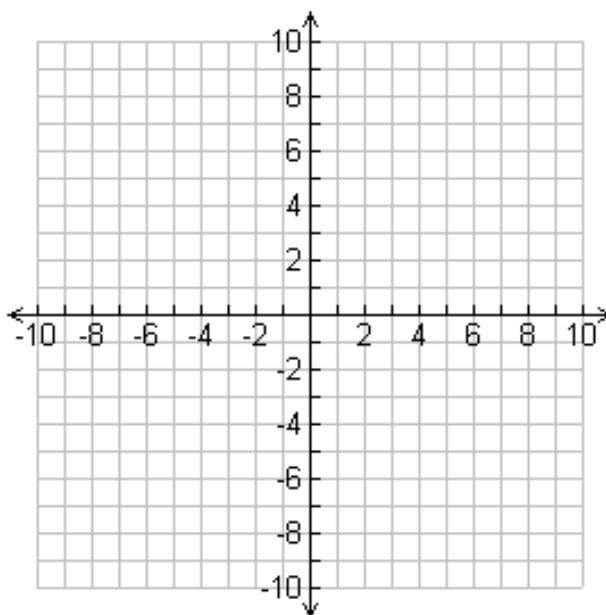
Negative: _____

Maximum: _____ Absolute or Relative

Minimum: _____ Absolute or Relative

X-intercept(s): _____

Is the graph a function? YES or NO



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

Parent Function: _____

Transformation: _____

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

Positive: _____

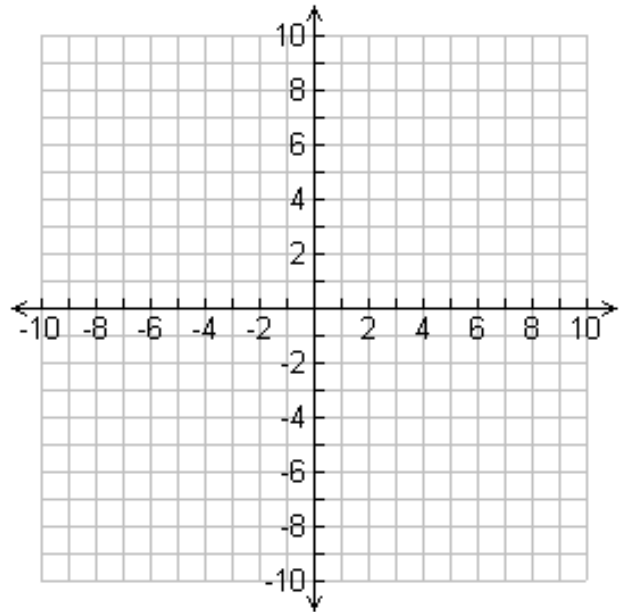
Negative: _____

Maximum: _____ Absolute or Relative

Minimum: _____ Absolute or Relative

X-intercept(s): _____

Is the graph a function? YES or NO



4. $y = -\sqrt{3x + 6} - 1$

Parent Function: _____

Transformation: _____

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

Positive: _____

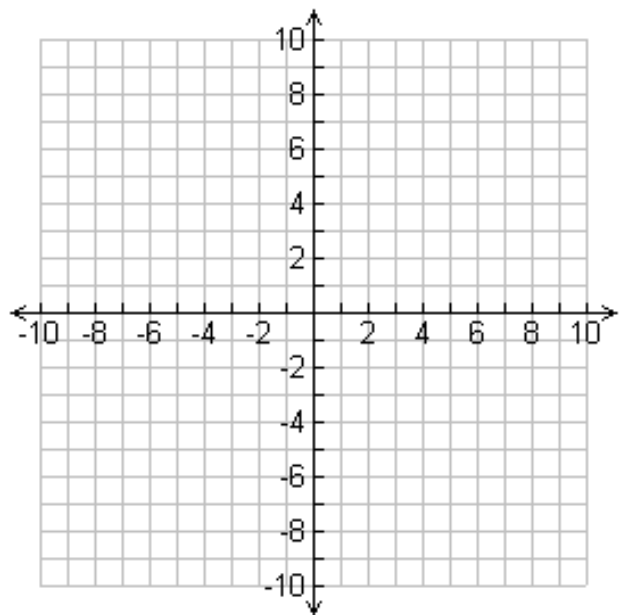
Negative: _____

Maximum: _____ Absolute or Relative

Minimum: _____ Absolute or Relative

X-intercept(s): _____

Is the graph a function? YES or NO



5. $y = 2\sqrt[3]{x+3} + 2$

Parent Function: _____

Transformation: _____

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

Positive: _____

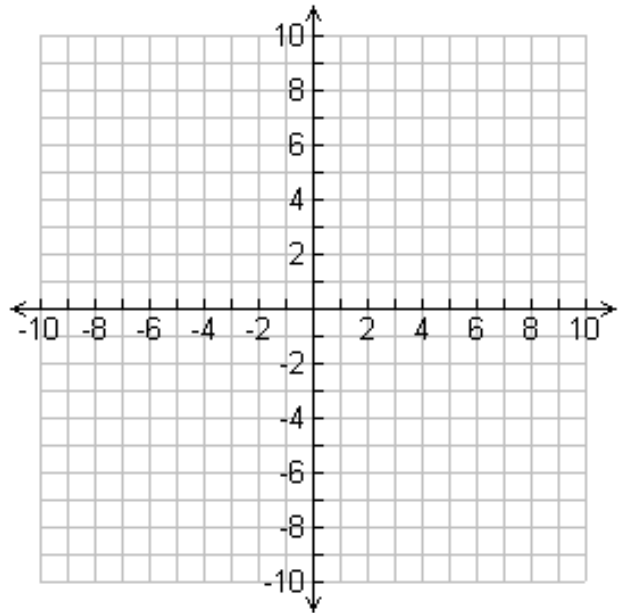
Negative: _____

Maximum: _____ Absolute or Relative

Minimum: _____ Absolute or Relative

X-intercept(s): _____

Is the graph a function? YES or NO



(#6 is optional extra practice)

6. $y = (9x + 3)^2 - 2$

Parent Function: _____

Transformation: _____

Domain: _____

Range: _____

Increasing: _____

Decreasing: _____

Positive: _____

Negative: _____

Maximum: _____ Absolute or Relative

Minimum: _____ Absolute or Relative

X-intercept(s): _____

Is the graph a function? YES or NO

