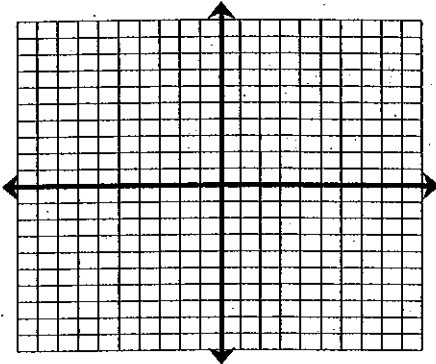


Graphing Worksheet: Absolute Value

Name _____

Graph and identify the following characteristics for each absolute value function.

1. $y = -|x - 4| - 1$



Vertex: _____

Domain: _____

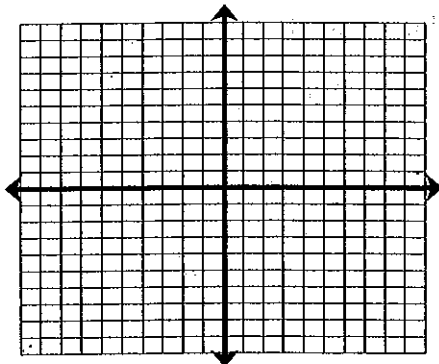
Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

2. $y = |x + 5| - 4$



Vertex: _____

Domain: _____

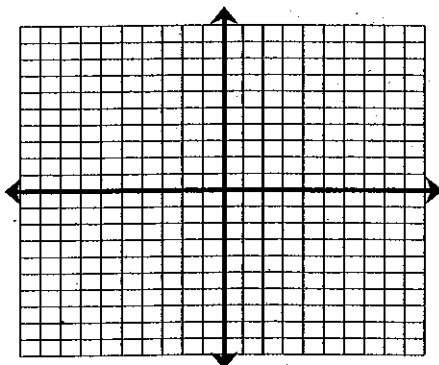
Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

3. $y = -2|x| + 7$



Vertex: _____

Domain: _____

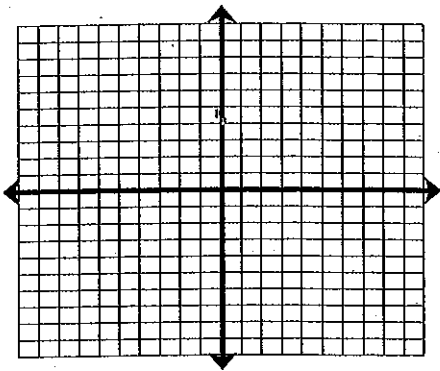
Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

4. $y = \frac{1}{2}|x - 6|$



Vertex: _____

Domain: _____

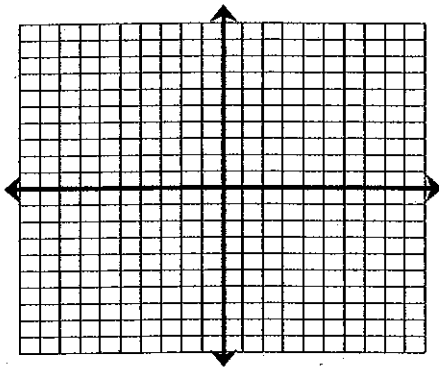
Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

5. $y = -3|x + 2| + 5$



Vertex: _____

Domain: _____

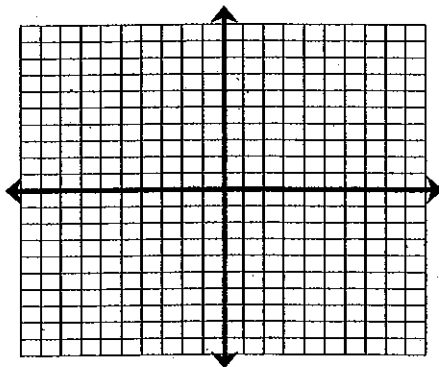
Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

6. $y = 2|x - 3| + 4$



Vertex: _____

Domain: _____

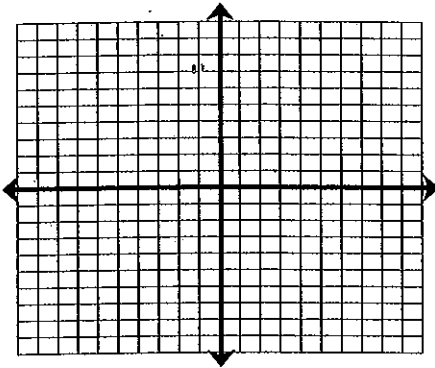
Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

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



Vertex: _____

Domain: _____

Range: _____

Extrema: _____

Increasing Interval _____

Decreasing Interval _____

Write the equation for the given transformation.

8. Using the parent graph $y = |x|$, write an equation that shifts the graph left 2, and reflect it over the x-axis.

9. Using the parent graph $y = |x|$, write an equation that shifts left 5, up 2

20. Using the parent graph $y = |x|$, write an equation that shifts the graph right 9, down 6 and reflect it over the x-axis.

21. Take the parent graph $y = |x|$, and write an equation that will shift the graph 2 units to the right and down 7 units.

22. Take the parent graph $y = |x|$, and write an equation that will shift the graph 2 units to the right and down 7 units.

23 Using the parent graph $y = |x|$, write an equation that shifts down 2, right 7, stretches by 5

24. Using the parent graph $y = |x|$, write an equation that shifts the graph right 4, and reflect it over the x-axis.

25. Using the parent graph $y = |x|$, write an equation that shifts the graph up 4, left 1 and shrink vertically by $\frac{1}{3}$

26. Using the parent graph $y = |x|$, write an equation that shifts the graph right 1, up 5 stretch by $\frac{8}{3}$ and reflect it over the x-axis.

27. Take the parent graph $y = |x|$, and write an equation that will shift the graph 7 units to the left and down 3 units.