

4-1 Critical Parts of Nonlinear Functions

Name _____ Per. ____

For each equation below, identify the vertex, decide if it is a maximum or minimum, and determine the steepness of the function.

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

vertex:

maximum/minimum:

steepness:

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

vertex:

maximum/minimum:

steepness:

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

vertex:

maximum/minimum:

steepness:

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

vertex:

maximum/minimum:

steepness:

5. $y = -\frac{2}{5}(x + 1)^2 - 4$

vertex:

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