1. Graphing a Parabola from Vertex Form Worksheet Graph each function.
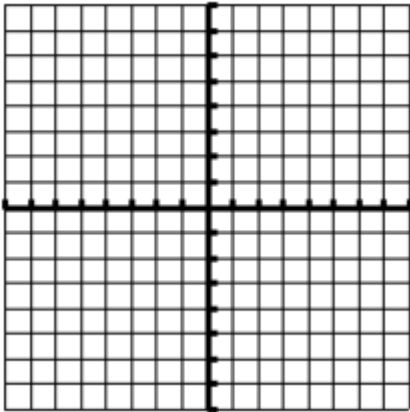
a) $y = 2(x + 1)^2$

Vertex = _____

A.O.S. = _____

Is the vertex a max or min? _____
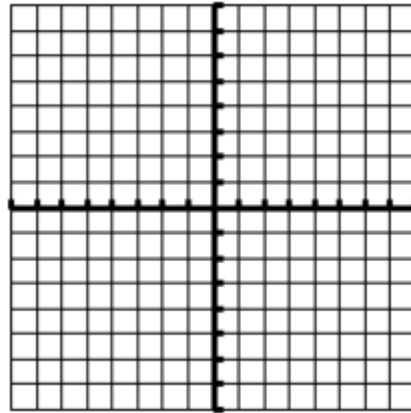
Stretch/Compression = _____

b) $y = \frac{1}{2}(x - 3)^2 - 5$

Vertex = _____

A.O.S. = _____

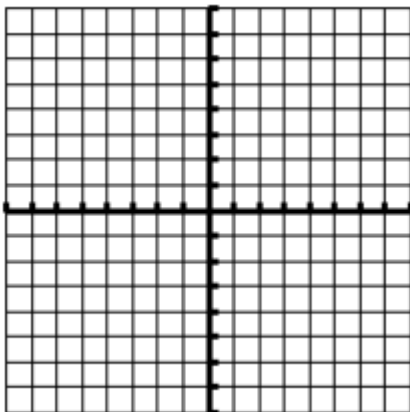Is the vertex a max or min? _____

Stretch/Compression = _____

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

Vertex = _____

A.O.S. = _____

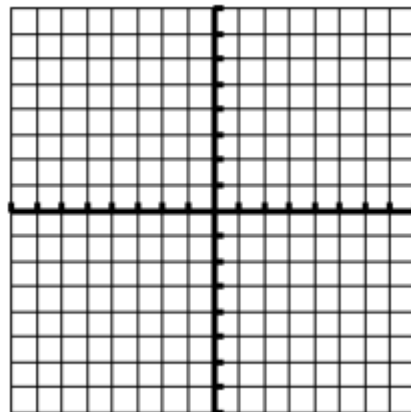Is the vertex a max or min? _____

Stretch/Compression = _____

d) $y = 2(x - 5)^2$
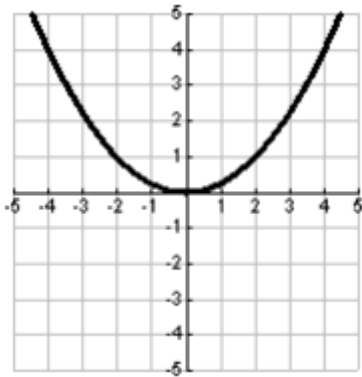
Vertex = _____

A.O.S. = _____

Is the vertex a max or min? _____
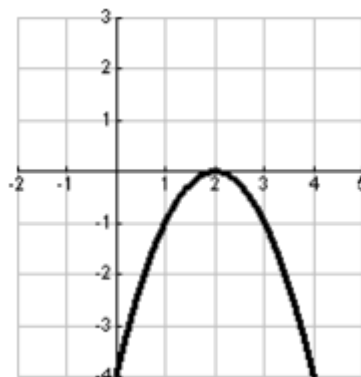
Stretch/Compression = _____

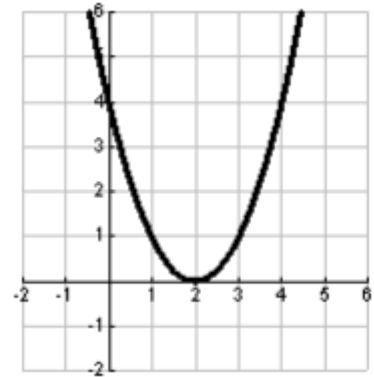2. Write the equation of each parabola in vertex form.

a) _____   b) _____   c) _____

3. Given the following information, determine the equation of the quadratic relation.

a) compressed by a factor of $\frac{1}{2}$, opens down and has its vertex at (4, 2)

b) stretched by factor of 3 with a minimum value of 5 and the axis of symmetry at x = 1

4. Write the equation of each parabola in vertex form.

a) vertex (1,2), point (2,-5)   b) vertex (3,5) and x-intercepts of 2 and 4   c) vertex (-1,-4), y-intercept: 3

5. The vertex of the parabola is (-2, -4). One x-intercept is 7. What is the other x-intercept?