Algebraic Reasoning Name:_____

Per:____

POINTS:____

Classwork #18 Quiz

Be sure to include your work when appropriate.

Describe the transformation of the quadratic parent function, $f(x) = x^2$ that will result in the graph of the quadratic function given.

1.
$$h(x) = (\frac{1}{2}x)^2 - 1$$

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2. $h(x) = -2(3x + 10)^2 + 3$

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Identify the domain, range, x-intercept, yintercept and vertex of the quadratic function described by the equation shown below. Write the domain and range as inequalities, as intervals, and in set builder notation.

3.
$$f(x) = 2(x + 1)^2 - 8$$

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4. $f(x) = 6(2x - 10)^2 - 3$

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5.
$$f(x) = -(\frac{1}{2}x - 3)^2 - 1$$

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