Algebraic Reasoning

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Per:\_\_\_\_\_

POINTS:\_\_\_\_

Classwork #19 Quiz

**Be sure to include your work when appropriate.**

**Describe the transformation of the quadratic parent function, f(x) = x3 that will result in the graph of the quadratic function given.**

1. h(x) = (2x – 1)3

2. h(x) = - (x – 6)3 + 3

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**Identify the domain, range, x-intercept and y-intercept of the cubic function described by the equation shown below. Write the domain and range as intervals, and in set builder notation.**

3. f(x) = 2(-x + 2)3 – 3

**Identify the domain, range, relative minimum, relative maximum, x-intercept and y-intercept of the cubic function described by the equation shown below. Write the domain and range as intervals, and in set builder notation.**

**4.** f(x) = (x – 4) (x + 2) (3x + 1)

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