Algebraic Reasoning	
Name:	
Per:	

Name:____

Per:____

POINTS:____

Homework #19 Quiz

Be sure to include your work when appropriate.

Describe the transformation of the cubic parent function, $f(x) = x^3$, that will result in the graph of the cubic function given.

1.
$$q(x) = -3(x)^3 + 4$$

POINTS:____

Be sure to include your work when appropriate.

Describe the transformation of the cubic parent function, $f(x) = x^3$, that will result in the graph of the cubic function given.

1.
$$g(x) = -3(x)^3 + 4$$

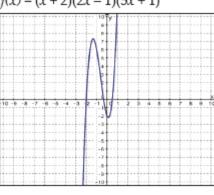
2.
$$g(x) = -(-6x + 5)^3 - 3$$

2.
$$q(x) = -(-6x + 5)^3 - 3$$

Identify the domain, range, relative minimum, relative maximum, x-intercept, and y-intercept of the cubic function described by the equation and the graph. Write the domain and range as intervals.

4.

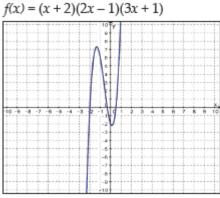
$$f(x) = (x+2)(2x-1)(3x+1)$$



and the graph. Write the domain and range as intervals.

4.

$$f(x) = (x + 2)(2x - 1)(3x + 1)$$



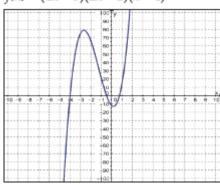
Identify the domain, range, relative minimum,

relative maximum, x-intercept, and y-intercept

of the cubic function described by the equation

5.

$$f(x) = (4x - 3)(2x + 1)(x + 4)$$



5.

$$f(x) = (4x - 3)(2x + 1)(x + 4)$$

