

I. Identify the needed information from the equation of the transformed function.

a. $g(x) = -(x + 8)^3 - 5$ Name _____

Transformations _____

b. $f(x) = \frac{5}{3}|x - 3| + 2$ Name _____

Transformations _____

c. $h(x) = -2x^2 - 12x + 7$ Name _____

Transformations _____

II. Write an equation of a function given the name and transformations

a. Square Root: Vertically stretched by a factor of 9, Translate 7 units up and reflected over the x-axis

b. Cube Root: Vertically compressed by a factor of 0.25 and shifted 3 units left and 8 units down

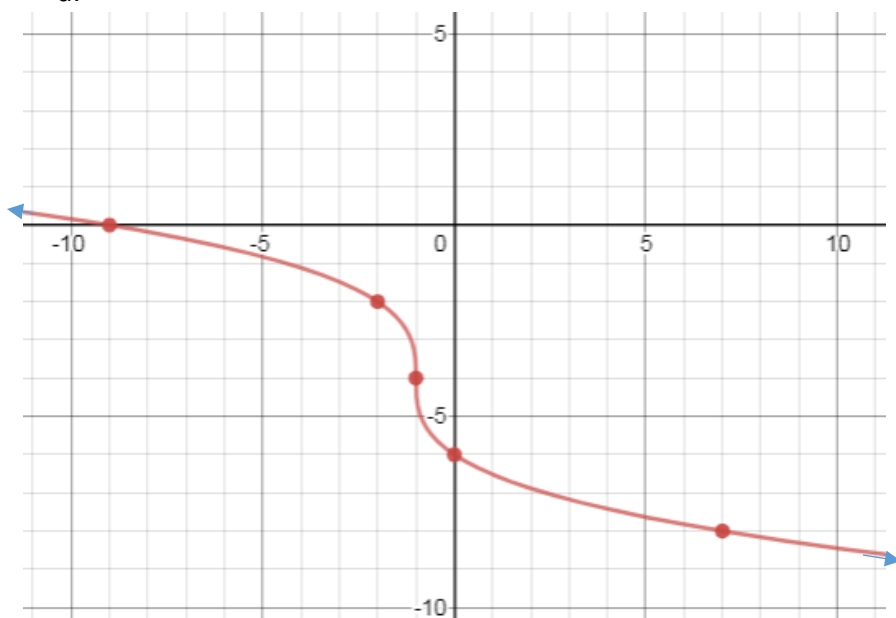
c. Quadratic (**in standard form**): Vertically stretched by a factor of 5, reflected over the x-axis, translated 7 units up and 1 unit right

III. Write an equation of a new function given a **NON PARENT** function

Given $y = -\sqrt{x-2} + 6$: Shift is 3 units left, 8 units down, reflect it over the x-axis and vertically stretch by a factor of 5

IV. Write an equation given the graph of the transformed function (Don't forget the "a" value).
State the domain and range of each function.

a.



b.

