

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## 2.5 Transformations a, h, k HOMEWORK

Identify the transformations of each listed function and name the parent function

Example:  $y = \sqrt{x+4} - 5$

Parent function: Square Root

Transformations:

Shift left 4 units

Shift down 5 units

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

6)  $y = 2(x-6)^2 - 4$

2)  $y = \frac{2}{3}x^2 + 8$

7)  $y = \frac{8}{3}|x+3| - 2$

3)  $y = -\frac{5}{4}(x-2)^3 + 7$

8)  $y = -2(x-1)^3$

4)  $y = \frac{1}{4}|x-3|$

9)  $y = \frac{-3\sqrt{x-7}}{4} - 2$

5)  $y = -\sqrt{x+3} + 2$