Math III Graphing Using Parent Graphs and Transformations
For the problems below, state what parent function it is built from, state transformations that are taking place, sketch each step in different colors and check your final solutions on a graphing calculator.
$f(x)=-3|x-4|+9$
Parent Function:

Parent with multiplier and what it means:

$f(x)=-\sqrt{x}+8$
Parent Function:

Parent with multiplier and what it means:

Parent with multiplier and shifts and what it means:

$f(x)=-.5(x-5)^{3}$
Parent Function:

Parent with multiplier and what it means:

Parent with multiplier and shifts and what it means:


$$
f(x)=-(x+5)^{2}-3
$$

Parent Function:

Parent with multiplier and what it means:

Parent with multiplier and shifts and what it means:


$$
f(x)=2 \sqrt[3]{x-2}-3
$$

Parent Function:

Parent with multiplier and what it means:

Parent with multiplier and shifts and what it means:


$$
f(x)=2|x+6|-6
$$

## Parent Function:

Parent with multiplier and what it means:

Parent with multiplier and shifts and what it means:


