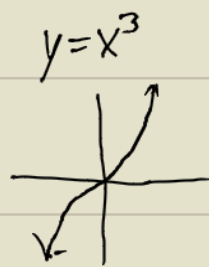
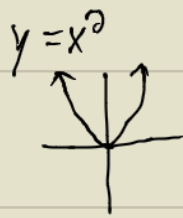
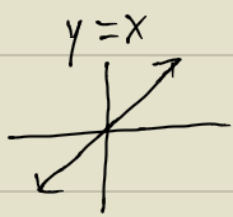


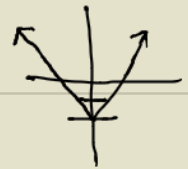
BASIC FUNCTIONS



1. $f(x) = x^2 + 3$
UP 3

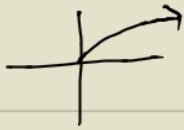


2. $f(x) = |x| - 2$
DOWN 2

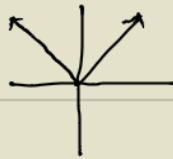


VERTICAL TRANSLATIONS

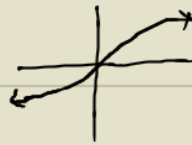
$y = \sqrt{x}$



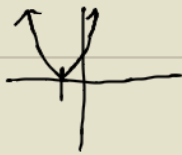
$y = |x|$



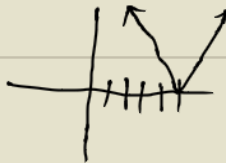
$y = \sqrt[3]{x}$



3. $f(x) = (x+1)^2$
LEFT 1



4. $f(x) = |x-5|$
RIGHT 5

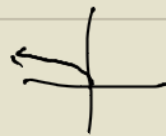
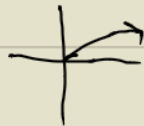


HORIZONTAL TRANSLATIONS

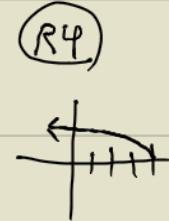
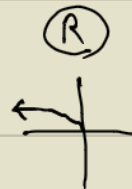
5. $f(x) = -x^2$
REFLECTS ACROSS X-AXIS



6. $f(x) = \sqrt{-x}$
REFLECTS ACROSS Y-AXIS



7. $f(x) = \sqrt{-x+4}$
 $= \sqrt{-(x-4)}$
REFLECT ACROSS Y-AXIS RIGHT 4



8. $f(x) = -(x+2)^2 - 1$
REFLECT ACROSS X-AXIS LEFT 2 DOWN 1

