Graphs of Basic Functions- MEMORIZE THESE !
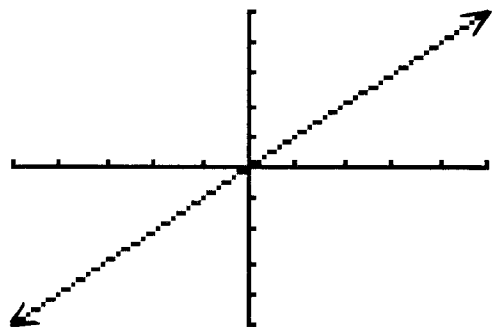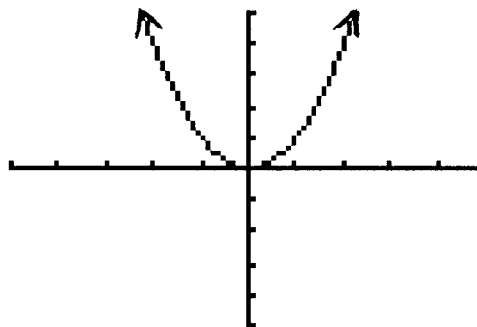
Identity Function

$y = x$

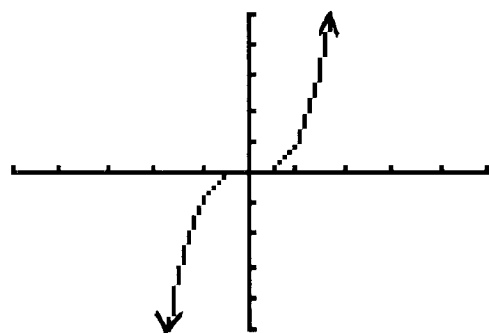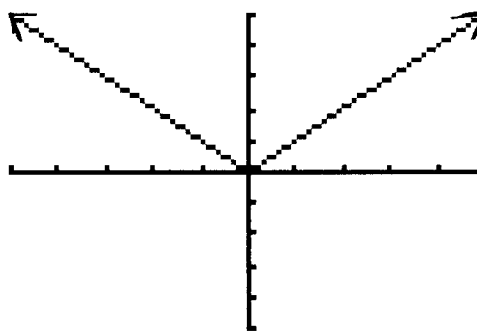$D = (-\infty, \infty) \; R = (-\infty, \infty)$

Squaring Function

$f(x) = x^2$

$D = (-\infty, \infty) \; R = [0, \infty)$

Cubing Function

$f(x) = x^3$
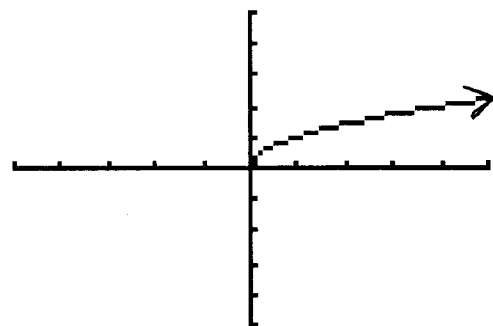
$D = (-\infty, \infty) \; R = (-\infty, \infty)$
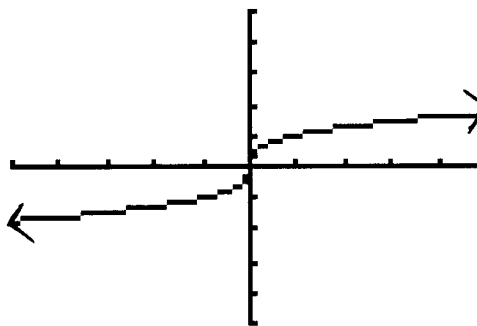
Absolute Value Function

$f(x) = |x|$

$D = (-\infty, \infty) \; R = [0, \infty)$

Square Root Function

$f(x) = \sqrt{x}$

$D = [0, \infty) \qquad R = [0, \infty)$

Cube Root Function

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

$D = (-\infty, \infty) \; R = (-\infty, \infty)$