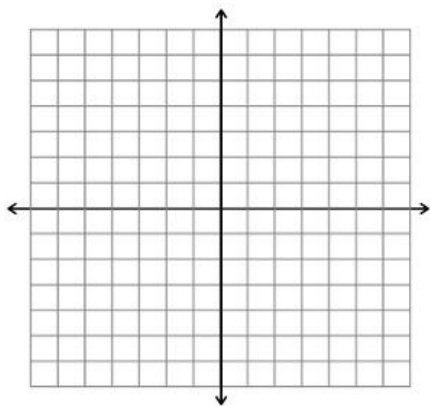
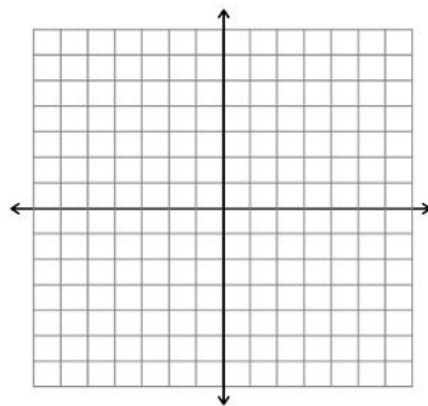


Parent Graphs and Transformations: Parabolas



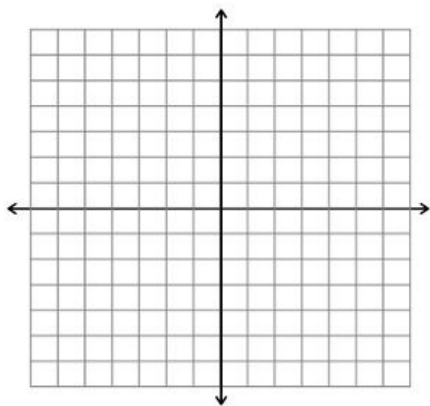
$$f(x) = x^2$$

$f(x)$ $f(x)$



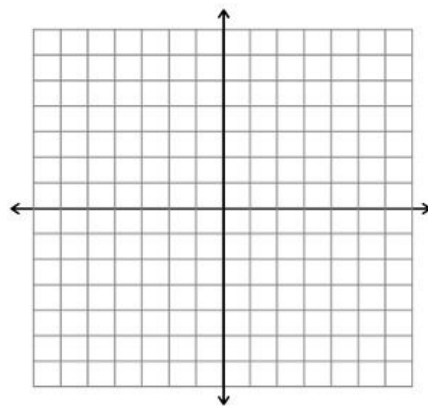
$$f(x) = (x + 3)^2$$

$f(x)$



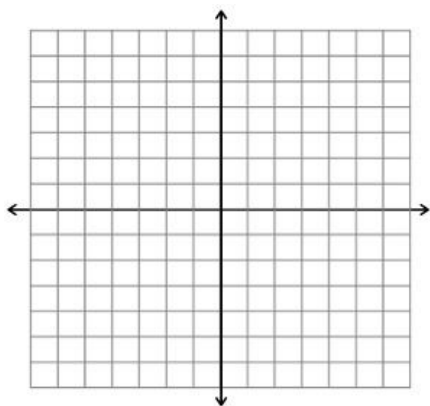
$$f(x) = (x - 3)^2$$

$f(x)$



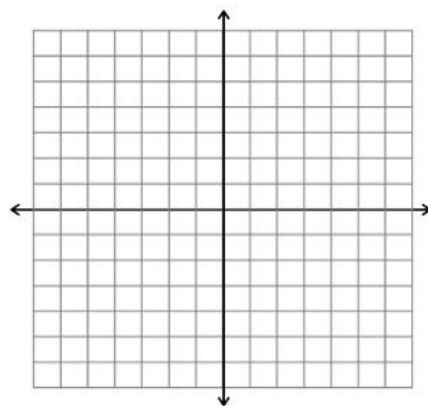
$$f(x) = x^2 + 3$$

$f(x)$



$$f(x) = x^2 - 3$$

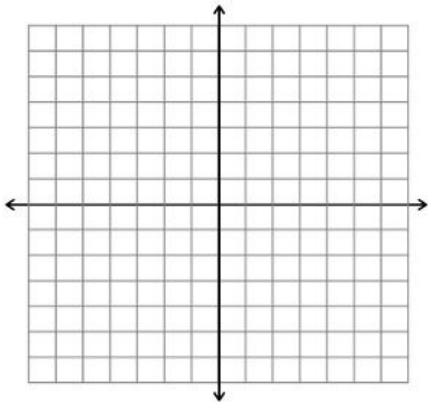
$f(x)$



$$f(x) = -x^2$$

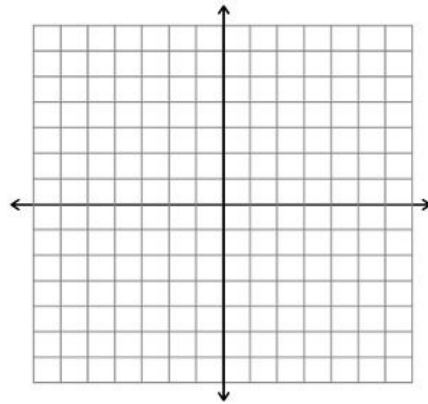
$f(x)$

Parent Graphs and Transformations: Absolute Value



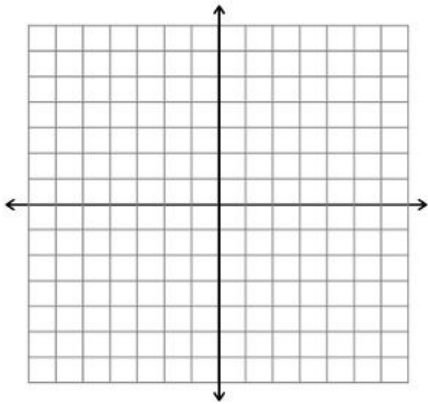
$$f(x) = |x|$$

$f(x)$ $f(x)$



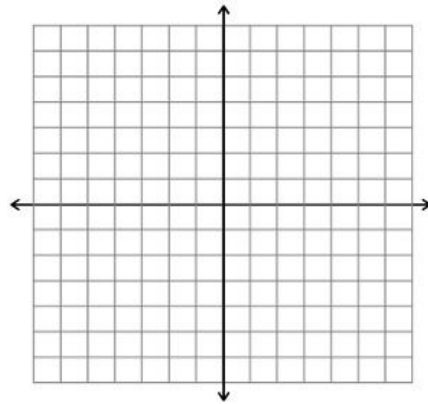
$$f(x) = |x + 3|$$

$f(x)$



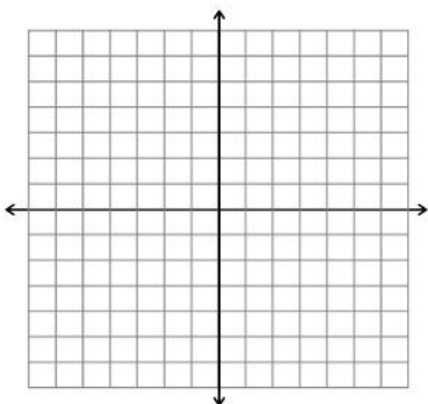
$$f(x) = |x - 3|$$

$f(x)$



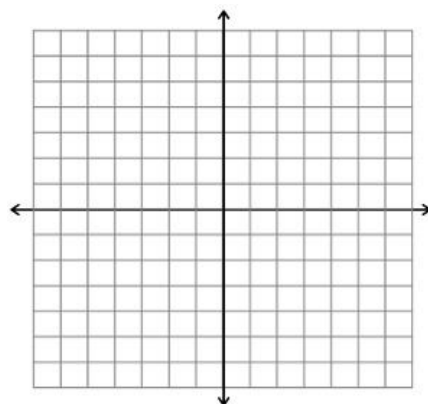
$$f(x) = |x| + 3$$

$f(x)$



$$f(x) = |x| - 3$$

$f(x)$



$$f(x) = -|x|$$

$f(x)$