

Quadratic Functions: Shifting

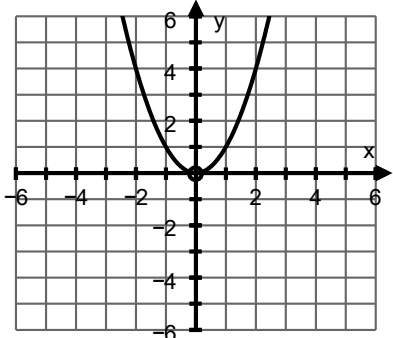
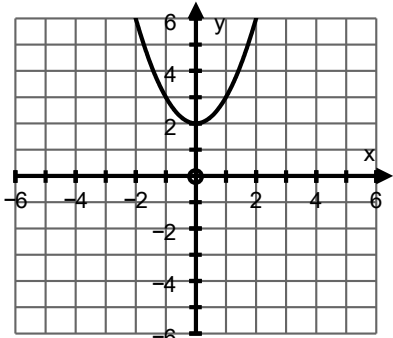
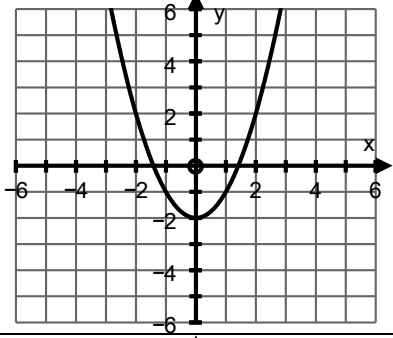
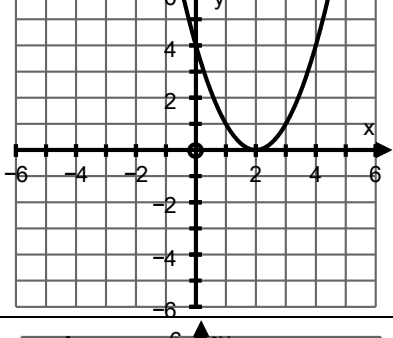
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Shifting by 2:

If 2 is “inside the brackets” with x, it’s a shift right or left.

If 2 is “outside the brackets”, it’s a shift up or down.

Of course this example works just the same for any other number.

$y = x^2$	original (unshifted) function	
$y = x^2 + 2$	shifted up by 2	
$y = x^2 - 2$	shifted down by 2	
$y = (x - 2)^2$	shifted right by 2	
$y = (x + 2)^2$	shifted left by 2	