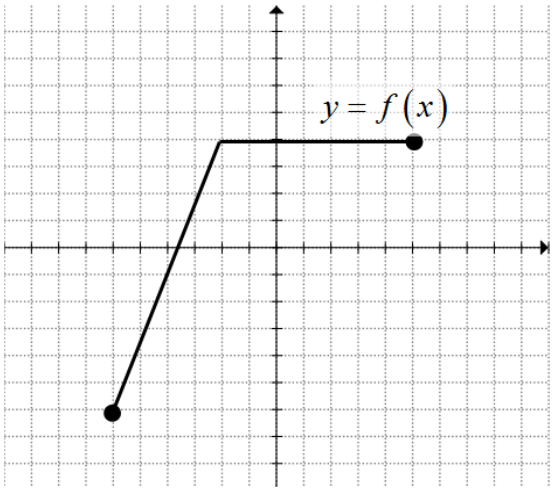
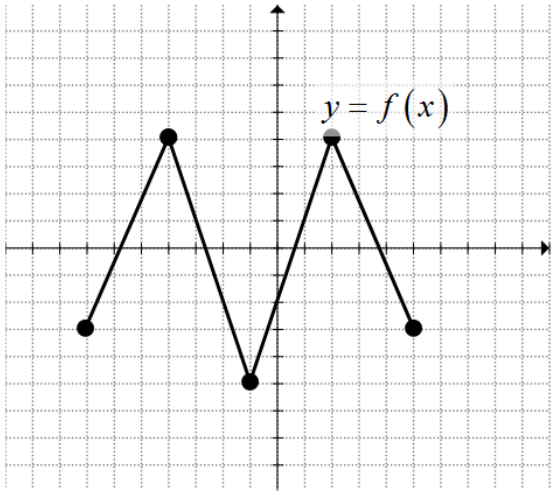
Function Transformations

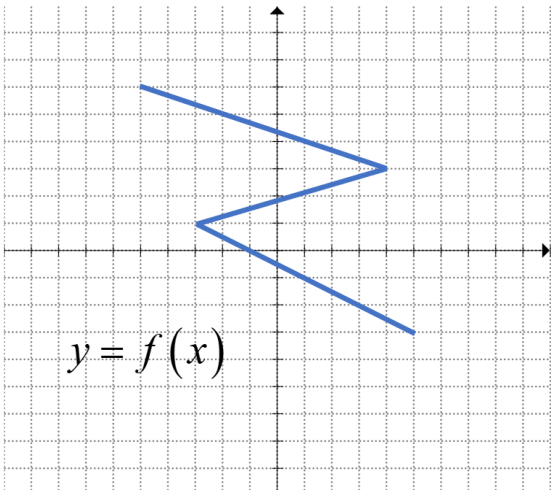
Given the graph of $y = f(x)$, draw the resulting image after each transformation:



$y = f(-x)$



$y = -f(x)$



$x = f(y)$

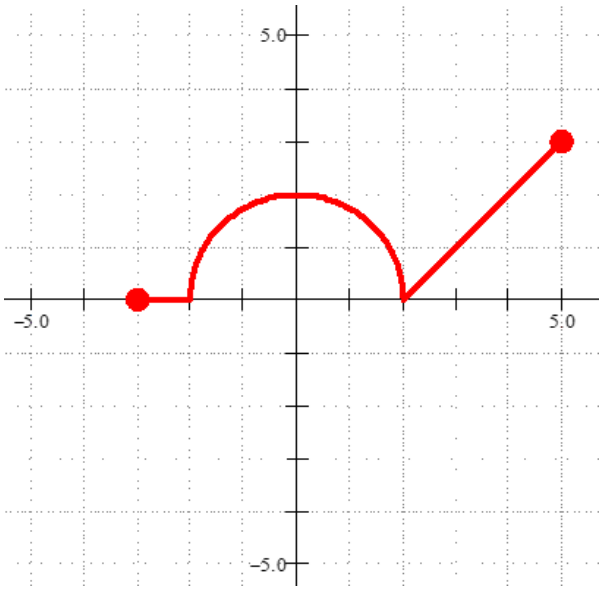
The function $f(x)$ is shown. Sketch the new function, defined by.

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

$$g(x) = f(x - 2) + 3$$

$$g(x) = 2f(x)$$

$$g(x) = -2f(x) + 1$$



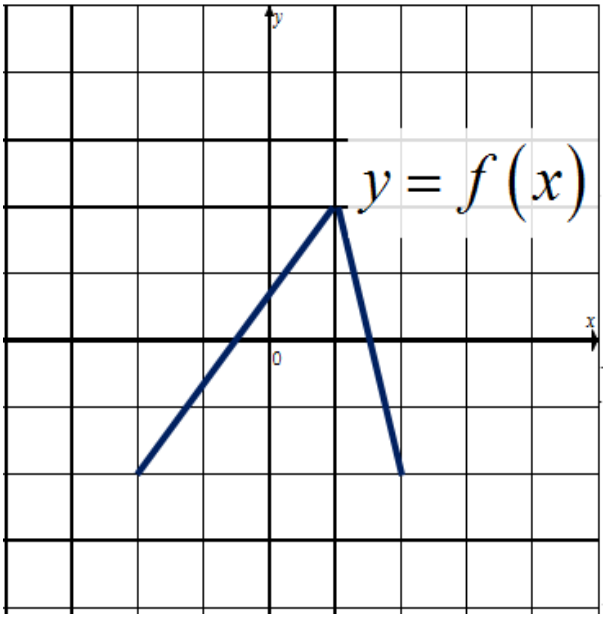
The function $= f(x)$ is shown. Sketch the new function, defined by.

$$y = f(x - 1)$$

$$y = 0.5f(x) + 1$$

$$y = 2f(3x)$$

$$y = 2f(2x - 1) - 1$$



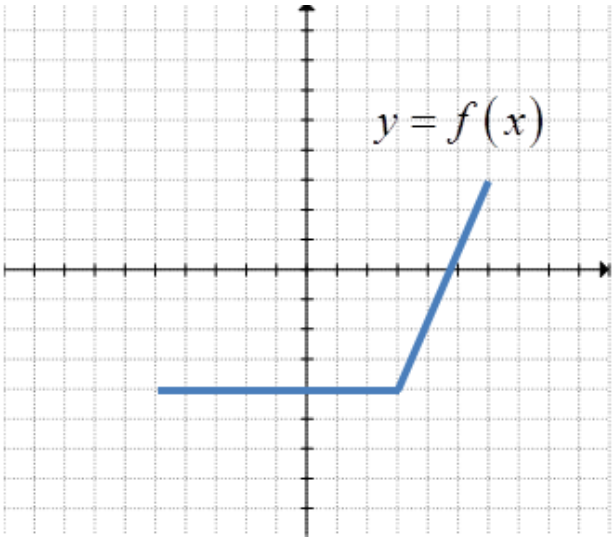
Given the graph of $y = f(x)$, draw the graph of the following functions:

$$y = 2f(x)$$

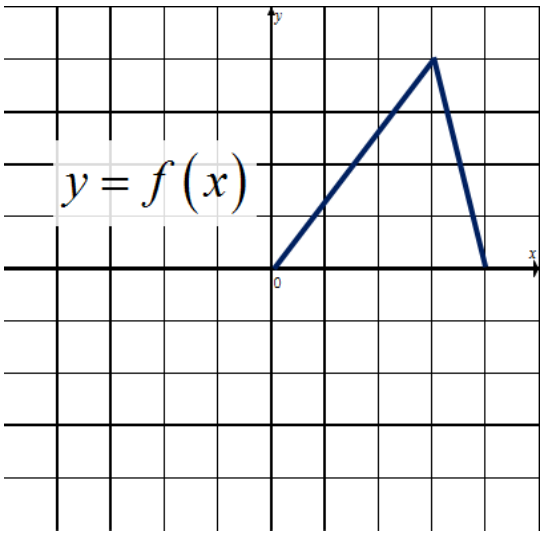
$$x = -0.5f(2y)$$

$$y = 5 - 3f(1 - 2x)$$

$$y = f(0.25x - 1) + 1$$



The graph of the function $y = f(x)$ is transformed to produce the graph of the function $y = g(x)$. An equation for $g(x) = \pm af\big(b(x-h)\big) + k$ in terms of $f(x)$ is



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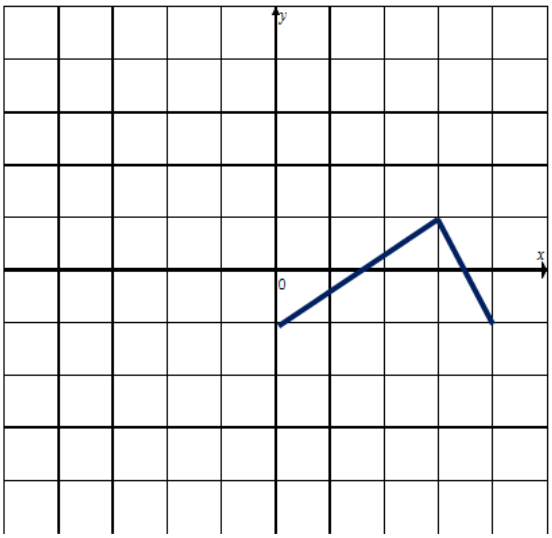

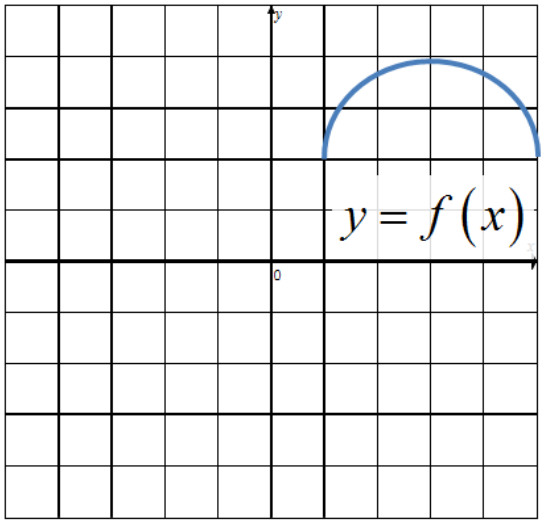

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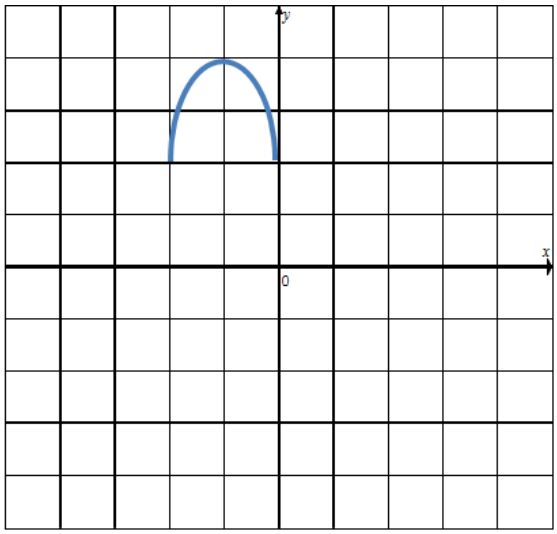

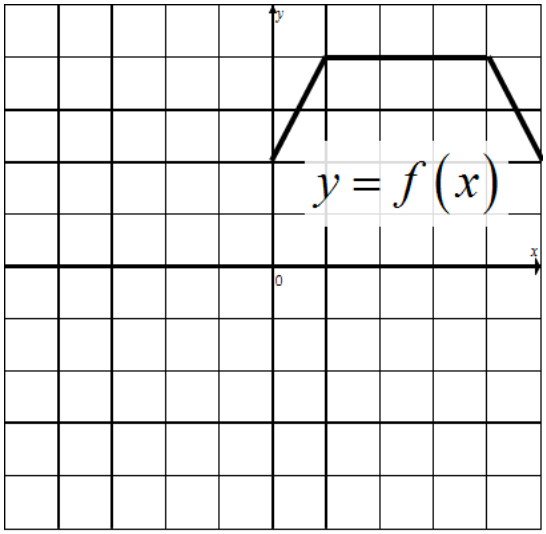

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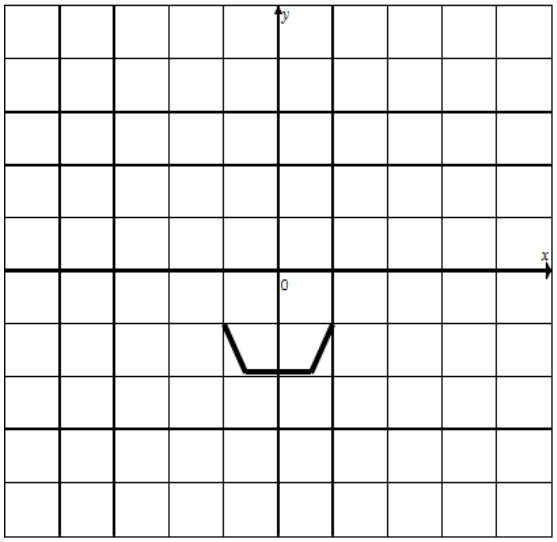

Given the graph of $y = f(x)$ and the graph after transformation, what is the equation of the function transformation?