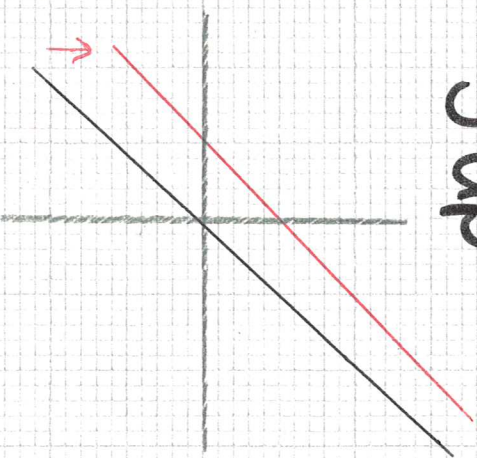


TRANSFORMING GRAPHS

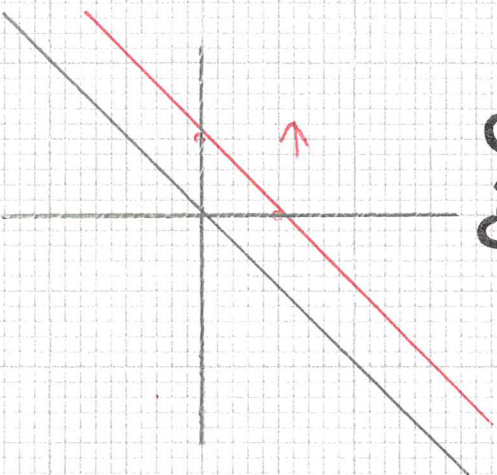
$$y = f(x) + 5$$

5 up



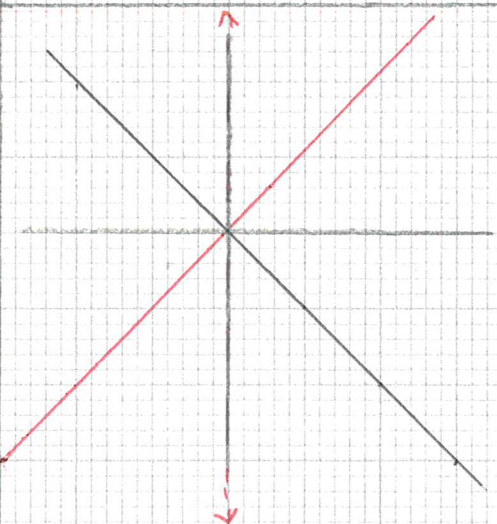
$$y = f(x + 5)$$

5 left



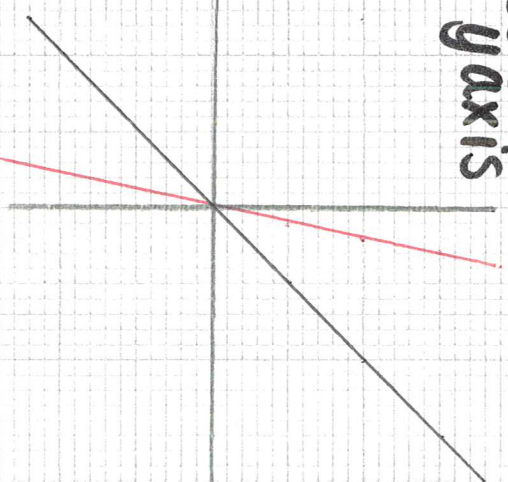
$$y = -f(x)$$

Reflect in x axis



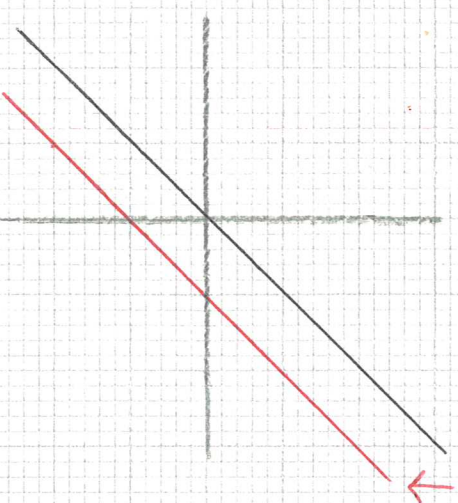
$$y = 5f(x)$$

stretch SF 5 in y axis



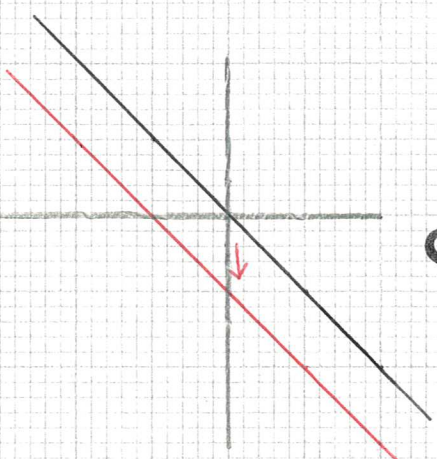
$$y = f(x) - 5$$

5 down



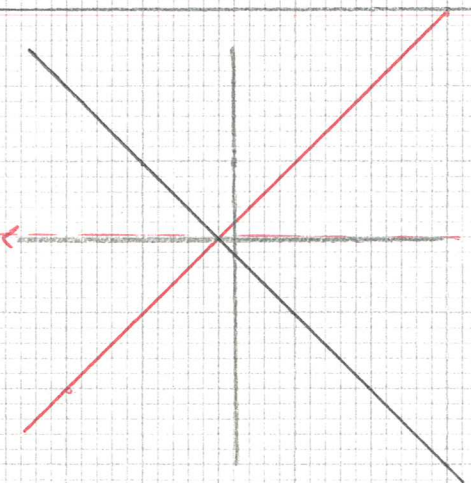
$$y = f(x - 5)$$

5 right



$$y = f(-x)$$

reflect in y axis



$$y = f(5x)$$

stretch SF $\frac{1}{5}$ in x axis

