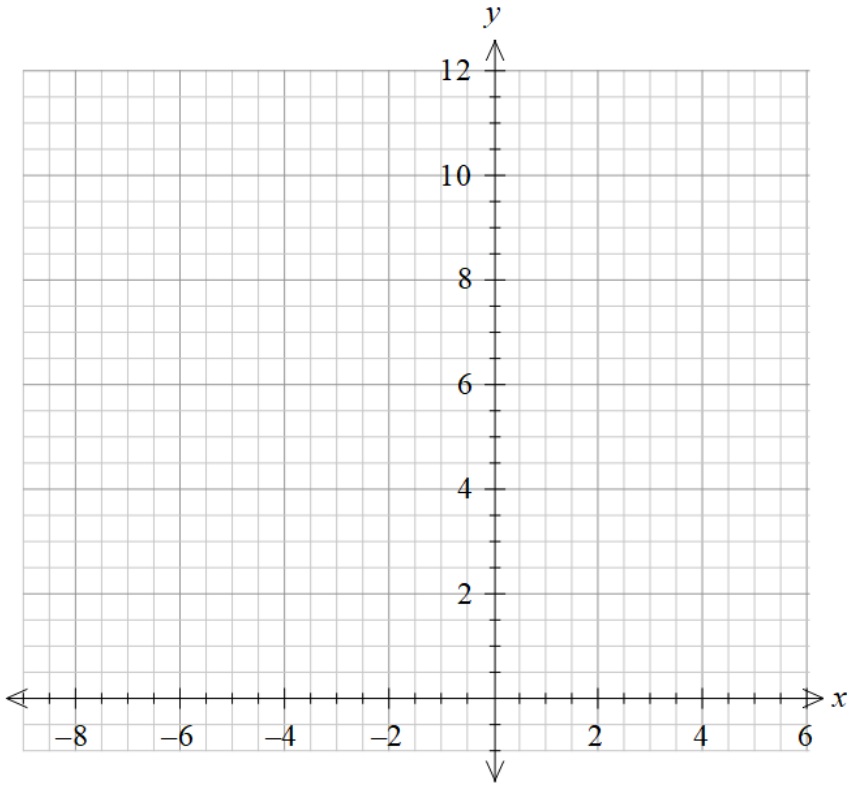
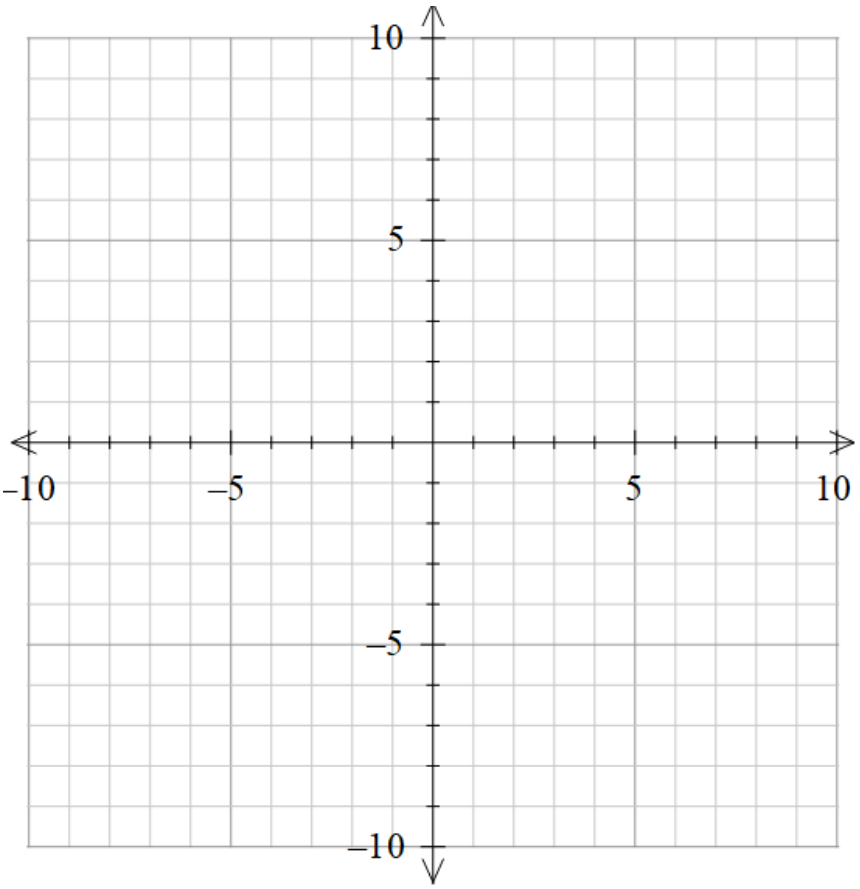
TRANSFORMATIONS OF GRAPHS USING $y = k\,f(x)$ AND $y = k\,f(x+b)$

1 On the same diagram, draw the graph of each equation, stating the dilation factor.

(a) $y = x^2,\ y = 3x^2,\ y = 3(x+2)^2$

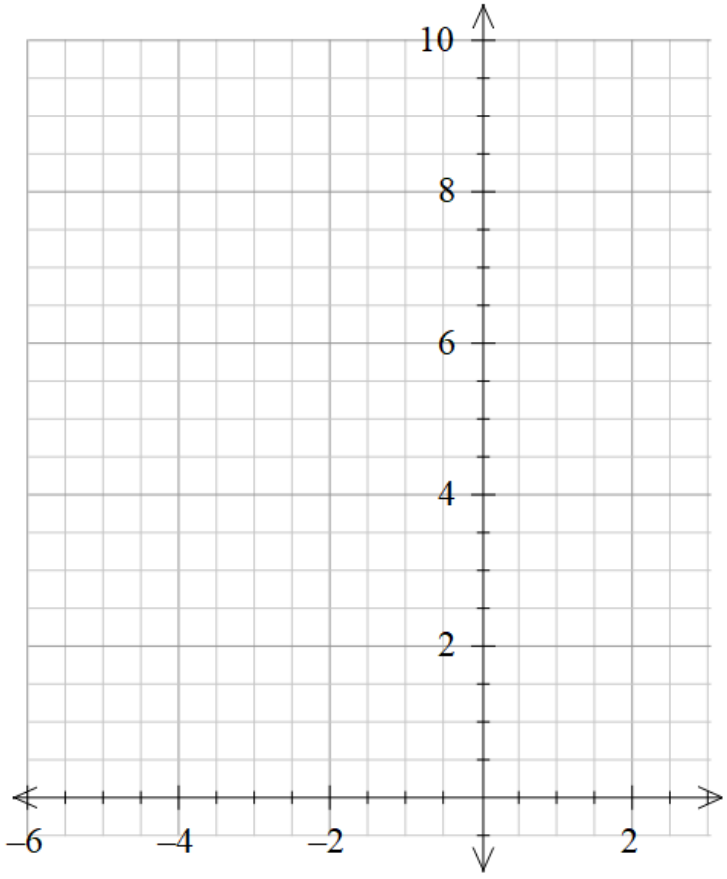


(b) $y = x^3,\ y = 2x^3,\ y = 2(x-1)^3$



TRANSFORMATIONS OF GRAPHS USING $y = k\,f(x)$ AND $y = k\,f(x+b)$

(a) $y = e^x, y = \frac{e^x}{2}, y = \frac{e^{x-1}}{2}$



(b) $y = \sin x, y = 2\sin x, y = 2\sin\left(x - \frac{\pi}{2}\right)$ for $-\pi \le x \le \pi$