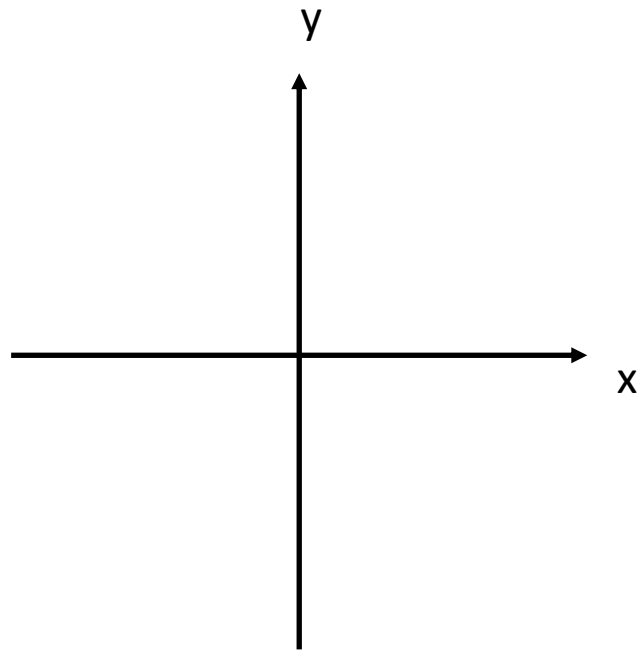# 4E Translating Graphs

1. Sketch the following graphs:
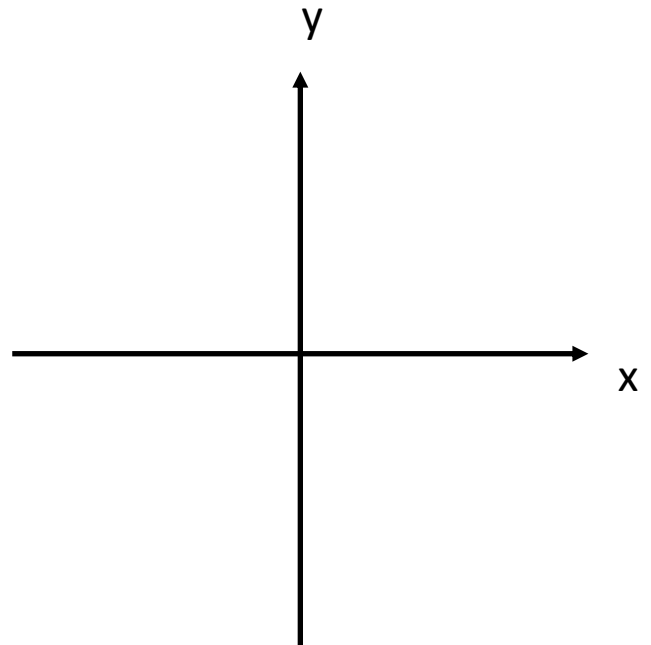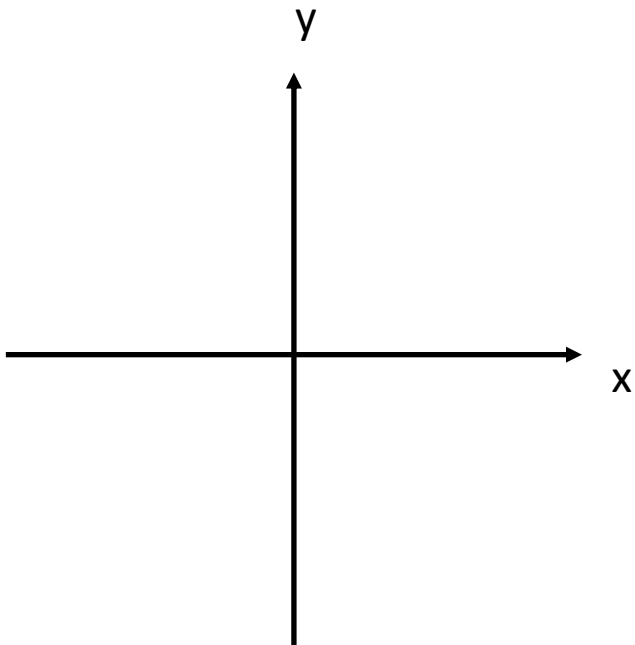   a) $y = x^2$
   b) $y = (x - 2)^2$
   c) $y = x^2 + 2$

y

x

2. Given that $f(x) = x^3$ and $g(x) = x(x - 2)$,
   sketch the graphs of $y = f(x + 1)$ and $y = g(x + 1)$

y

x

y

x

3. Given that $h(x) = \frac{1}{x}$, sketch the curve with equation $y = h(x) + 1$, stating the equations of any asymptotes and intersections with the axes