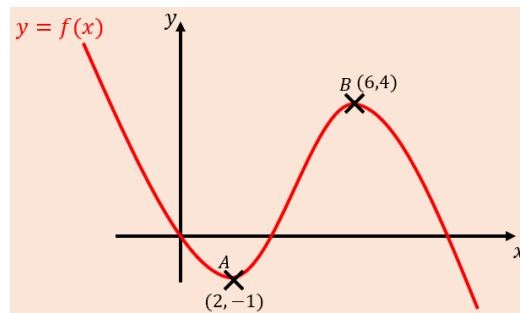
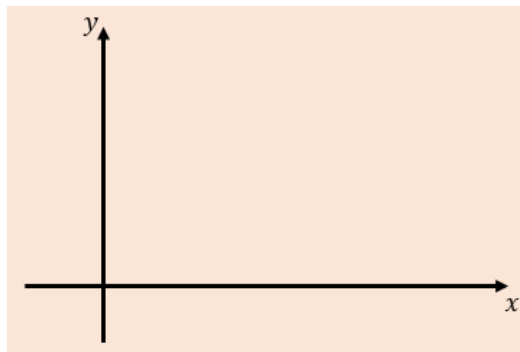


2F Multiple Graphical Transformations

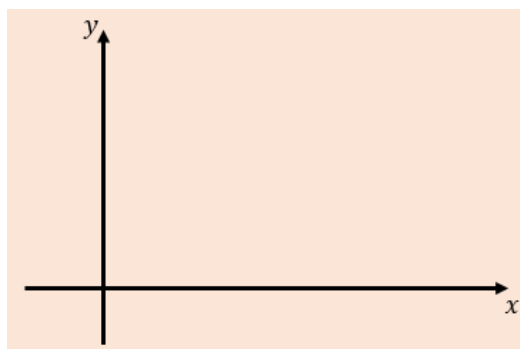
1. The diagram shows the sketch of $y = f(x)$.



- a) Sketch the graph of $y = 2f(x) - 1$



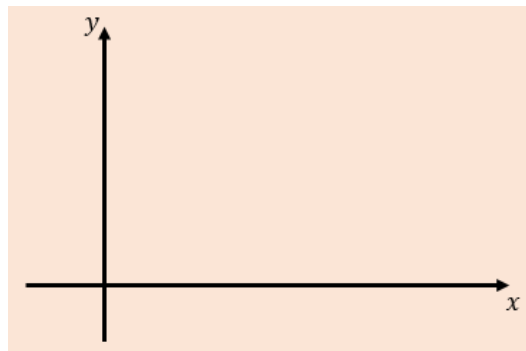
- b) Sketch the graph of $y = f(x + 2) + 2$



c) Sketch the graph of $y = \frac{1}{4}f(2x)$



d) Sketch the graph of $y = -f(x - 1)$

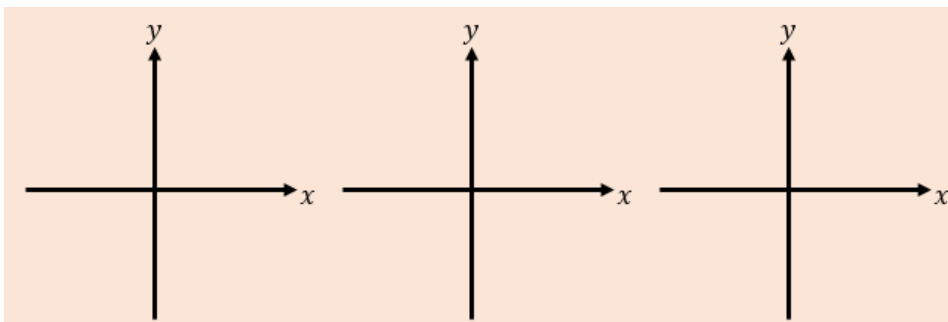


2. Given that:

$$f(x) = \ln x, x > 0$$

Sketch the graphs of:

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



b) $y = |f(-x)|$

