1. Draw the graphs of the following functions using function transformations:

    (a) $f(x) = 4(3x + 2) + 1$

    (b) $f(x) = \frac{1}{2} (4x + 1)^2 - 2$

    (c) $f(x) = 4x^2 + 3x + 2$

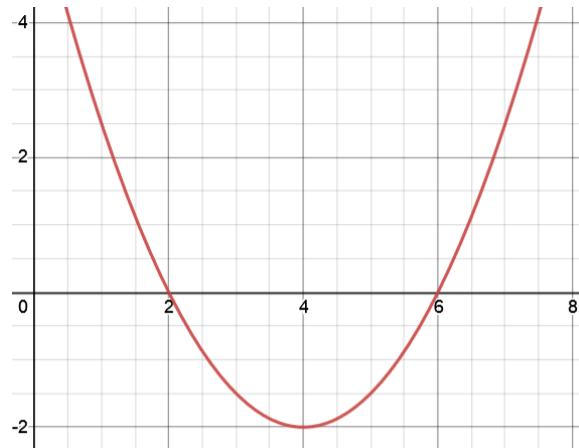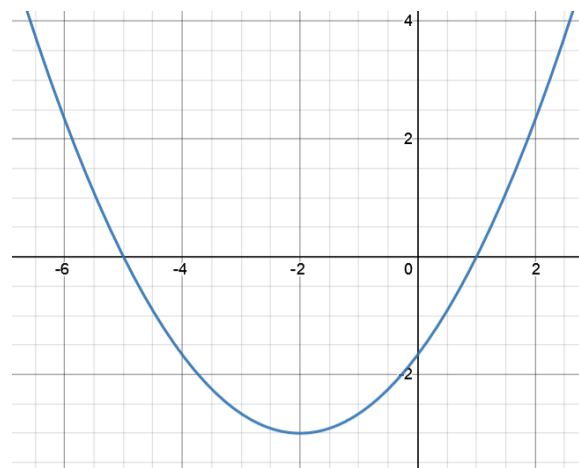2. Determine the following functions, given the graph and the base function.

Figure 1: Base function: $f(x) = x^2$

Figure 2: Base function: $f(x) = x^2$