Let $f(x) = x^3 - 2x$.

1. Plot $f(x)$ from $x = -2$ to $x = 2$.
   (a) Where does $f$ have local maxima? minima?
   (b) Where is $f$ concave up? concave down?
   (c) Where does $f$ have inflection points?

2. In each case, plot the graph and explain how the graphs are related to the graph of $y = f(x)$.
   (a) $y = f(x) + 2$ and $y = f(x) - 1$
   (b) $y = f(x + 2)$ and $y = f(x - 1)$
   (c) $y = 2\ f(x)$ and $y = 0.5\ f(x)$
   (d) $y = f(2x)$ and $y = f(0.5x)$