1. Find the maximum and minimum value of $f(x) = x^3 - 3x + 5$ over the interval $[0, 2]$.

2. Find a function with stationary points at $x = -1$, $x = 0$ and $x = 2$.

3. For which values of k, if any, does the function $f(x) = (8x + k)/x^2$ have a local minimum at $x = 4$?

4. A particle moves along a straight line so that its velocity after t minutes is given by $v(t) = t^2$. How far does the travel between $t = 1$ and $t = 3$?