1. A rocket is launching, and its height h in meters is a function of t in seconds (so we are considering the function $h(t)$). Explain what $h'(10) = 1035$ means in language your parents could understand. You answer must include units.

Compute derivatives of the following functions using derivative rules.

2. $f(t) = \sqrt{t}e^t$

3. $f(t) = e^{-t}$

4. $f(t) = e^{2t}$

5. $f(x) = \dfrac{e^{2x}}{1 - e^{x}}$