(7.) (10 points) For some positive constant $C$, a patient’s temperature change, $T$, due to a dose, $D$, of a drug is given by

$$T = f(D) = \left( \frac{C}{2} - \frac{D}{3} \right) D^2.$$ 

(a) What dosage maximizes the temperature change?

(b) The sensitivity of the body to the drug is defined as $dT/dD$. What dosage maximizes sensitivity?