1. A 300 gallon tank is full of milk containing 2% butterfat. Milk containing 1% butterfat is pumped in at 10 gallons per minute starting at 10:00 AM and the well mixed milk is drained off at 15 gallons per minute. What is the percent butterfat in the milk in the tank 5 minutes later at 10:05 AM?
2. Compute the Taylor polynomials \( T_0^a \), \( T_1^a \), and \( T_2^a \) for the function \( f(x) = \log x \) where \( a = 1 \) and \( a = e^2 \).

3. **Bonus**: What kind of motorcycle should I get?