1. The half-life of a substance is 4 minutes. The original mass is 100 grams. How much of the substance remains after 15 minutes?

2. Write a logistic function if:

Initial value = 10, Limit to growth = 50, Passes through (2,30)

3. Solve for x: $\log(x+1) - \log(2x-1) = \dfrac{1}{2}\log 4$

4. Write the equation of an exponential function that goes through (0,2) and (3,12). (Round b-value to nearest hundredths.)