

1.
 - The function f is not linear.
 - The function g is linear.
 - The function h is linear.

2.
 - $f(t) = 2(2)^{t/5}$ or $f(t) \approx 2(1.15)^t$
 - $g(t) = 0.03t + 0.02$
 - $h(t) = -0.6t + 20$

3.
 - (a) At 14 weeks from the start of her research, there were 129 rabbits in the field.
 - (b) Since $R(0) = 20$, there were 20 rabbits in the field at the start of her research.
 - (c) $\frac{\Delta R}{\Delta t} = \frac{R(6) - R(0)}{6 - 0} \approx \frac{110.95 - 20}{6} \approx 15.2$ rabbits/week. During the first 6 weeks, the rabbit population increased at an average rate of 15.2 rabbits per week.