

HOMEWORK QUIZ – Exponential & Logistic Modeling	
Date:	Form A
Name	
1. Identify the function as either growth or decay, and find the constant percentage rate of growth or decay. $P(t) = 2.9(1.0125)^t$	
2. Write the exponential function that represents and initial value of 24, decreasing at a rate of 18% per week.	
Questions 3–4: The population of an endangered turtle after $t$ years in a protected park is modeled by the function $P(t) = \frac{1025}{1 + 85e^{-0.3t}}$	
3. What was the initial population of turtles?	
4. When will the number of turtles reach 800?	
Grade:	

HOMEWORK QUIZ – Exponential & Logistic Modeling	
Date:	Form B
Name	
1. Identify the function as either growth or decay, and find the constant percentage rate of growth or decay. $P(t) = 3.4(0.9215)^t$	
2. Write the exponential function that represents and initial value of 32, increasing at a rate of 8% per week.	
Questions 3–4: The population of an endangered rabbit after $t$ years in a protected park is modeled by the function $P(t) = \frac{1042}{1 + 64e^{-0.2t}}$	
3. What was the initial population of rabbits?	
4. When will the number of rabbits reach 600?	
Grade:	