(Optional) 3.2 Warm-Up

Friday, November 6, 2015

1:48 PM

Precalculus

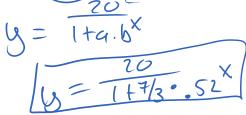
Exponential and Logistic Growth Opener

Name: $y = \overline{(+a \cdot b)}$ Period:

Find the <u>logistic growth function</u> that models the data below:

y=a.bx

1. Initial Height = 6, Limit to Growth = 20, passing through (3, 15)



Find an exponential function that models the data below:

3. Initial population = 67,000, increasing at a rate of 1.67% per day

$$y = I(1 \pm r)^{t}$$

 $y = 67,000(1.0167)^{t}$

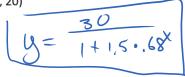
Precalculus

Exponential and Logistic Growth Opener

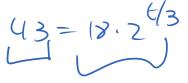
Find the logistic growth function that models the data below:

1. Initial Height = 6, Limit to Growth = 20, passing through (3, 15)

2. Initial Value = 12, Limit to Growth = 30, passing through (2, 20)



4. Initial height = 18cm, doubling every 3 weeks



Name:

4=a.6X

Period:

2. Initial Value = 12, Limit to Growth = 30, passing through (2, 20)

Find an exponential function that models the data below:

- Initial population = 67,000, increasing at a rate of 1.67% per day
- 4. Initial height = 18cm, doubling every 3 weeks

