

Name: _____ Per: ____ Date: _____

Logarithm Functions Test

1. In 2008 there were 350 mountain lions, unfortunately they are decreasing by 14% each year due to deforestation, in what year will the population be only 100 lions?

2. There were 50 elephants on a reservation in 2008 and growing at a rate of 6.4% per year, in Africa there were 1000 elephants but their population is decreasing at rate of 10.8%, in what year will the population be the same?

3. You have two investment options, they are both CD's compounded monthly. The first you can deposit \$8,000 at a rate of 6% and the other you can only deposit \$6,000 but the rate is 9.6%, how many year before the investments are equal?

4. On the 5th day there were 50,000 leaves on a particular tree on the 10th day the number of leaves had dropped to 10,000. How many days before there are only 100 leaves on the tree? Assuming the drop is at a constant percent rate.

5. On the 2nd day investment A was worth \$4500 and on the 8th day, the investment A was worth \$6000. On the 3rd day investment B was worth 3500 and on the 12th day investment B was worth \$7000 on which day would the investments be the same?