

LESSON 6.6 Assignment

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- c. Forest rangers begin applying an effective insecticide during the 16th year of Kawa's study. The number of trees killed during the 16th year is 20% less than the number of trees killed during the 15th year. The number of trees killed each year after the insecticide application continues to decrease at this rate during the remainder of the study. How many total trees will be saved during the 25-year study as a result of the insecticide application?

2. Terrence just won the Jumbo Megabucks Lottery. He must decide between two payout options. For Option A, Terrence would be paid \$50,000 the first year, \$55,000 the second year, \$60,000 the third year, and so on for a total of 20 years. For Option B, Terrence would be paid \$50,000 the first year, and the amount he would be paid each successive year would be 6% more than the amount he was paid the previous year for a total of 20 years.

- a. Which option would pay Terrence more in the 20th year?

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- b. Which Option would pay Terrence more over the 20-year period?

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Name _____ Date _____

3. Savanna and Lauren played professional basketball in the same league. Savanna scored 850 points in her rookie year and increased her yearly point total by 2% each successive year. Lauren scored 800 points in her rookie year and increased her yearly point total by 25 points each successive year.
- a. Which player scored the most points in her 15th year?
- b. Which player had the most total points in her 15-year career?
- c. After a 3-year retirement, Lauren makes a comeback. Her first year back she scores 600 points and her yearly point total decreases by 10% in each successive year. Determine Lauren's career point total if her comeback lasts 5 years.