

52. **CHALLENGE** A college student finances a computer that costs \$1850. The financing plan states that as long as a minimum monthly payment of 2.25% of the remaining balance is made, the student does not have to pay interest for 24 months. The student makes only the minimum monthly payments until the last payment. What is the amount of the last payment if the student buys the computer without paying interest? Round your answer to the nearest cent.

53. **MULTI-STEP PROBLEM** Maximal oxygen consumption is the maximum volume of oxygen (in liters per minute) that the body uses during exercise. Maximal oxygen consumption varies from person to person and decreases with age by about 0.5% per year after age 25 for active adults.



a. **Model** A 25-year-old female athlete has a maximal oxygen consumption of 4 liters per minute. Another 25-year-old female athlete has a maximal oxygen consumption of 3.5 liters per minute. Write a function for each athlete that models the maximal consumption each year after age 25.

b. **Graph** Graph the models in the same coordinate plane.

c. **Estimate** About how old will the first athlete be when her maximal oxygen consumption is equal to what the second athlete's maximal oxygen consumption is at age 25?



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Lesson 4.6;
TAKS Workbook

54. **TAKS PRACTICE** On a certain day, a pound of apples costs $\frac{3}{4}$ the price of a pound of oranges. If you have enough money to buy 12 pounds of apples, how many pounds of oranges can you buy? **TAKS Obj. 3**

- (A) 8 (B) 9 (C) 15 (D) 16

REVIEW

TAKS Preparation
p. 836;
TAKS Workbook

55. **TAKS PRACTICE** A cylindrical container has a volume of 100 cubic centimeters. If the container is dilated by a scale factor of 3, what is the volume of the resulting container? **TAKS Obj. 8**

- (F) 300 cm^3 (G) 900 cm^3 (H) $10,000 \text{ cm}^3$ (J) Not here

QUIZ for Lessons 8.5–8.6

Graph the function.

1. $y = \left(\frac{5}{2}\right)^x$ (p. 520) 2. $y = 3 \cdot \left(\frac{1}{4}\right)^x$ (p. 531) 3. $y = \frac{1}{4} \cdot 3^x$ (p. 520)
4. $y = (0.1)^x$ (p. 531) 5. $y = 10 \cdot 5^x$ (p. 520) 6. $y = 7(0.4)^x$ (p. 531)

7. **COINS** You purchase a coin from a coin collector for \$25. Each year the value of the coin increases by 8%. Write a function that models the value of the coin over time. Then find the value of the coin after 10 years. Round to the nearest cent. (p. 520)