53. DIVING In a diving competition, a diver's score is the product of the difficulty level d of a dive and the sum of the scores x, y, and z of 3 judges. Write a simplified expression that represents the diver's score.

54. TAKS REASONING During the summer you give one hour saxophone lessons to 20 students each week. Use the information in the advertisement.

a. Model Write an equation that gives your weekly earnings y (in dollars) as a function of the number x of beginning students that you teach.

b. Calculate Find your weekly earnings if 15 of your 20 students are beginners.

c. Explain Suppose that you plan to teach for 10 weeks and want to earn $4000 for the summer. How many advanced students should you teach? Your answer should include the following:

- a table of values generated by the equation in part (a)
- an explanation of your method for answering the question

55. CHALLENGE A drama club plans to sell 100 tickets to a school musical. An adult ticket costs $6, and a student ticket costs $4. Students who attend the school get a $1 discount. The club expects two thirds of the student tickets to be discounted. Write an equation that gives the total revenue r (in dollars) as a function of the number a of adult tickets sold.

MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW Lesson 1.3; TAKS Workbook

56. TAKS PRACTICE You have $75 and start a new job from which you are able to save $35 each week. How much will you have altogether after 5 weeks at your new job? *TAKS Obj. 2*

Ⓐ $110 Ⓑ $175 Ⓒ $250 Ⓓ $550

REVIEW Skills Review Handbook p. 927; TAKS Workbook

57. TAKS PRACTICE What is the volume of a solid metal sphere with a diameter of 4 centimeters? *TAKS Obj. 8*

Ⓕ 16π cm^3 Ⓖ $\frac{32\pi}{3}$ cm^3 Ⓗ 32π cm^3 Ⓙ $\frac{64\pi}{3}$ cm^3

QUIZ for Lessons 2.4–2.5

Find the product. *(p. 88)*

1. $-5 \cdot (-5)$ **2.** $18 \cdot \left(-\frac{7}{6}\right)$ **3.** $8 \cdot \frac{4}{5} \cdot (-10)$ **4.** $9 \cdot (-7) \cdot (-1.2)$

5. $(-3x) \cdot (-4)$ **6.** $-\frac{2}{3}x \cdot 15$ **7.** $x \cdot 1.5 \cdot (-6.4)$ **8.** $(-2)(13x)$

Use the distributive property to write an equivalent expression. *(p. 96)*

9. $7(x + 14)$ **10.** $-4(5x + 9)$ **11.** $-5(2x - 6)$ **12.** $(3 - x)6$