62. CHALLENGE On January 1 of each year, you deposit $2000 in an individual retirement account (IRA) that pays 5% annual interest. You make a total of 30 deposits. How much money do you have in your IRA immediately after you make your last deposit?

MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW
Lesson 3.2; TAKS Workbook

63. TAKS PRACTICE The total cost of carnival tickets for 3 adults and 5 children is $49. The total cost of carnival tickets for 5 adults and 3 children is $55. What is the price, a, of one adult ticket and the price, c, of one child ticket? *TAKS Obj. 4*

(A) $a = \$5; c = \$8$ (B) $a = \$7.25; c = \$6.25$

(C) $a = \$8; c = \$5$ (D) $a = \$10; c = \$3.80$

REVIEW
Lesson 4.1; TAKS Workbook

64. TAKS PRACTICE What is the relationship between the graphs of $y = 3x^2$ and $y = 1.5x^2$? *TAKS Obj. 5*

(F) The graph of $y = 1.5x^2$ is a reflection of the graph of $y = 3x^2$ in the x-axis.

(G) The graph of $y = 1.5x^2$ is a 90° rotation of the graph of $y = 3x^2$ about the origin.

(H) The graph of $y = 1.5x^2$ is narrower than the graph of $y = 3x^2$.

(J) The graph of $y = 1.5x^2$ is wider than the graph of $y = 3x^2$.

QUIZ for Lessons 12.1–12.3

Write the next term in the sequence. Then write a rule for the nth term. *(p. 794)*

1. 1, 3, 5, 7, . . .

2. −5, 10, −15, 20, . . .

3. $\frac{1}{20}, \frac{2}{30}, \frac{3}{40}, \frac{4}{50}, \ldots$

4. 4, 16, 64, 256, . . .

5. 2, 6, 12, 20, . . .

6. 9, 36, 81, 144, . . .

Find the sum of the series. *(p. 794)*

7. $\sum_{i=1}^{4} 2i^3$

8. $\sum_{k=1}^{5} (k^2 + 3)$

9. $\sum_{n=2}^{6} \frac{1}{n-1}$

Write a rule for the nth term a_n of the arithmetic or geometric sequence. Find a_{15}, then find the sum of the first 15 terms of the sequence.

10. 1, 7, 13, 19, . . . *(p. 802)*

11. $\frac{1}{2}, 2, \frac{7}{2}, 5, \ldots$ *(p. 802)*

12. 5, 2, −1, −4, −7, . . . *(p. 802)*

13. 2, 8, 32, 128, . . . *(p. 810)*

14. $2, \frac{4}{3}, \frac{8}{9}, \frac{16}{27}, \ldots$ *(p. 810)*

15. −3, 15, −75, 375, . . . *(p. 810)*

16. COLLEGE TUITION In 1995, the average tuition at a public college in the United States was $2057. From 1995 through 2002, the average tuition at public colleges increased by about 6% per year. Write a rule for the average tuition a_n in terms of the year. Let $n = 1$ represent 1995. What was the average tuition at a public college in 2002? *(p. 810)*