

64. **CHALLENGE** From 1970 to 2002, the circulation C (in millions) of Sunday newspapers in the United States can be modeled by

$$C = -0.00105t^3 + 0.0281t^2 + 0.465t + 48.8$$

where t is the number of years since 1970. Rewrite C as a function of s , where s is the number of years since 1975.



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Lesson 2.5;
TAKS Workbook

65. **TAKS PRACTICE** The table shows the total cost y of heating oil. Which equation best represents the total cost of the heating oil as a function of the number of gallons x ? **TAKS Obj. 1**

- (A) $x = 0.67y$ (B) $y = 0.67x$
(C) $x = 1.5y$ (D) $y = 1.5x$

Number of gallons (x)	Total cost (y)
50	\$75
200	\$300
500	\$750

REVIEW

Skills Review
Handbook
p. 1006;
TAKS Workbook

66. **TAKS PRACTICE** A student is making a circle graph of the results of a survey that asked what people's favorite sport is. What central angle should be used for the section representing basketball? **TAKS Obj. 9**

- (F) 35° (G) 105°
(H) 126° (J) 234°

Activity	Number of people
Basketball	350
Soccer	210
Softball or Baseball	200
Other	240

QUIZ for Lessons 5.1–5.3

Evaluate the expression. (p. 330)

1. $3^5 \cdot 3^{-1}$ 2. $(2^4)^2$ 3. $\left(\frac{2}{3^{-2}}\right)^2$ 4. $\left(\frac{3}{5}\right)^{-2}$

Simplify the expression. (p. 330)

5. $(x^4y^{-2})(x^{-3}y^8)$ 6. $(a^2b^{-5})^{-3}$ 7. $\frac{x^3y^7}{x^{-4}y^0}$ 8. $\frac{c^3d^{-2}}{c^5d^{-1}}$

Graph the polynomial function. (p. 337)

9. $g(x) = 2x^3 - 3x + 1$ 10. $h(x) = x^4 - 4x + 2$ 11. $f(x) = -2x^3 + x^2 - 5$

Perform the indicated operation. (p. 346)

12. $(x^3 + x^2 - 6) - (2x^2 + 4x - 8)$ 13. $(-3x^2 + 4x - 10) + (x^2 - 9x + 15)$
14. $(x - 5)(x^2 - 5x + 7)$ 15. $(x + 3)(x - 6)(3x - 1)$

16. **NATIONAL DEBT** On July 21, 2004, the national debt of the United States was about \$7,282,000,000,000. The population of the United States at that time was about 294,000,000. Suppose the national debt was divided evenly among everyone in the United States. How much would each person owe? (p. 330)