Practice and Applications

Write each phrase as an algebraic expression.

10. fifteen increased by t

11. five years older than Luis

12. nine dollars less than j

13. a number less six

14. the product of r and 8

15. twice as many oranges

16. Emily's age divided by 3

17. a number divided by -12

Write each sentence as an algebraic equation.

18. The sum of a number and four is -8.

19. Two more than the number of cookies is 4.

20. The product of a number and five is -20.

21. Ten times the number of students is 280.

22. Ten inches less than her height equals 26.

23. Five less than a number equals 31.

24. Seven more than twice his age is 51.

25. Three more than twice a number is 15.

MONEY For Exercises 26 and 27, use the table.

The table shows the average lifespan of several kinds of paper currency in the United States. Let y represent the average lifespan of a $5 bill.

26. Which lifespan can be represented by $2y$?

27. Write an expression to represent the lifespan of a $50 bill.

28. **TOURISM** The Washington Monument is 555 feet tall. It is 75 feet shorter than the Gateway to the West Arch. Write an equation that models this situation.

U.S. Currency	
Kind	Lifespan (years)
$1	1.5
$5	2
$10	3
$20	4
$50	9
$100	9

Source: Federal Reserve System

29. **CRITICAL THINKING** If x is an odd number, how would you represent the odd number immediately following it? preceding it?

Spiral Review with Standardized Test Practice

30. **MULTIPLE CHOICE** A mechanic charges a $35 initial fee and $32.50 for each hour he works. Which equation could be used to find the cost c of a repair job that lasts h hours?

    Ⓐ $c = 32.5 + 35h$

    Ⓑ $c = 35 + 32.5h$

    Ⓒ $c = 32.5 - 35h$

    Ⓓ $c = 32.5(35 - h)$

31. **MULTIPLE CHOICE** Translate *12 more than d* into an algebraic expression.

    Ⓕ $12d$ Ⓖ $d - 12$ Ⓗ $d + 12$ Ⓘ $12 - d$

Divide. (Lesson 3-7)

32. $-18 \div 3$

33. $25 \div (-5)$

34. $-14 \div (-7)$

35. $72 \div (-9)$

GETTING READY FOR THE NEXT LESSON

PREREQUISITE SKILL Add. (Lesson 3-4)

36. $-8 + (-3)$

37. $-10 + 9$

38. $12 + (-20)$

39. $-15 + 15$

Math Online msmath2.net/self_check_quiz