

CHAPTER

Free Response

1 Test A

1. What is the next figure in the pattern? ▲ □ ● ▲ □ ● ▲

2. What is the missing number in the pattern 3, 6, 9, __, 15?

3. What is the value of 3^4 ?

4. The population of a small town is expected to double every 10 years. If the population was 36 in 2000, what will the population be in 2030?

5. Simplify the expression $[(4 + 6 \div 2) - 1]^2$.

6. Simplify the expression $10 + (5 \times 4 - 12) \times 2^2$.

7. Write an expression with two operations that simplifies to 1.

8. The expression $7 \times 4 = 4 \times 7$ is an example of which property?

9. $3 \times (2 + 5) = (3 \times 2) + (3 \times 5)$ is an example of which property?

10. Evaluate $a - 2b + 9$ for $a = 5$ and $b = 2$.

11. Evaluate $8 + p^2 - 3c$ for $p = 4$ and $c = 2$.

12. Evaluate $\frac{15}{x} - y$ for $x = 3$ and $y = 2$.

13. Write an expression equal to “four more than a number multiplied by 3.”

14. How would you write a phrase that represents the expression $2x + 4$?

15. Write an expression that represents the quotient of a number and seven.

16. Is $a = 7$ a solution of $4 = a - 3$? Show your work.

CHAPTER
1 **Free Response**
Test A, continued

17. Is $r = 4$ a solution of $20 = 4r$?
Show your work.

18. Solve the equation $14 + b = 30$.

19. During two weeks of training, Jenny ran 9 miles during the first week. Jenny ran 15 miles altogether. Write an equation containing addition to help you find how many miles she ran during the second week. Solve the equation.

20. Solve the equation $w - 8 = 20$.

21. David has 12 baseball cards left after giving away 5. Write an equation containing subtraction to help you find how many baseball cards David had before he gave some away. Solve the equation.

22. Solve the equation $2t = 88$.

23. Helena bought a new skateboard for \$120. If she saved \$15 towards the cost of the skateboard each week, how many weeks did she save for?

24. Solve the equation $\frac{d}{6} = 4$.

25. Abby has \$10. Abby has one-half the amount of money that Karen has. How much money does Karen have?
