Name Date

Test A

Chapter

3

Evaluate the expression when  and 

Answers

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11. See left.

12. See left.

13.

14.

15.

16.

17.

18.

19.

20.

21.

22.

1.  2. 

Write the phrase as an expression.

3. 10 multiplied by 7 4. the sum of 12 and a number *h*

Write the phrase as an expression. Then evaluate the expression when  and 

5. the product of 8 and a number *x*

6. the quotient of a number *y* and 2

Tell which property the statement illustrates.

7.  8. 

9. 

10. 

**Simplify the expression. Explain each step.**

11.  12. 

Use the Distributive Property to simplify the expression.

13.  14. 

Simplify the expression.

15.  16. 

17.  18. 

Factor the expression using the GCF.

19.  20. 

21.  22. 

Name Date

Test A **(continued)**

Chapter

3

Answers

23. See left.

24.

25. a.

b.

26. a.

b.

27.

28.

23. Complete the table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |

24. The running time (in minutes) of a TV episode is  where   
*c* is the number of commercials aired during the episode. What is the running time of an episode with 15 commercials?

25. To find the sales tax on an item, divide the price of the item by 20.

a. Write an algebraic expression to find the sales tax on an item that costs *d* dollars.

b. Find the sales tax on a television that costs $800.

26. A server at a restaurant works 5 hours on a weekday and 8 hours on   
a weekend day.

a. Write an expression for the total hours the server works on *x* weekdays and *y* weekend days.

b. Use the expression to find the number of hours the server works   
on 4 weekdays and 2 weekend days.

27. The sides of a square each have a length of  inches. Write an expression for the perimeter of the square (in inches).

28. The cost of a DVD (in dollars) can be represented by the expression  where *d* is the discount amount. Use the Distributive Property to write and simplify and expression for the cost of 3 DVDs.