

**CHAPTER  
1****Chapter Test B***For use after Chapter 1***Graph the numbers on a number line.**

1.  $-\frac{3}{4}, -4, 3, \frac{4}{3}, 4$

2.  $2, \pi, \sqrt{5}, -2.5, -1$

**Identify the property that the statement illustrates.**

3.  $c + (-c) = 0$

4.  $(g + 2) + b = g + (2 + b)$

**Convert the rate into the given units.**

5. 100 kilometers per hour to miles per hour

6. 2 tons per hour to ounces per second

**Evaluate the expression for the given value of the variable.**

7.  $3x^2 - 1; x = -1$

8.  $\sqrt{16t^2}; t = -4$

**In Exercises 9 and 10, use the following information.**

You have \$20 to spend on strawberries, which are sold for \$3 a pint.

9. Write an expression for the amount of money you have left after purchasing  $n$  pints of strawberries.

10. Evaluate the expression to find the amount of money you have left after purchasing 3 pints of strawberries.

**Solve the equation.**

11.  $\frac{2}{5}r - 9 = 1$

12.  $q \div \frac{2}{3} + 9 = 3$

13. You purchased a CD player and paid a total of \$54, including the 8% sales tax. What was the price of the CD player without the tax?

14. One lawn care worker can mow 3 lawns in 60 minutes, and another worker can mow 5 lawns in 75 minutes. How long will it take them to mow 7 lawns?

**Answers**

1. See left.

2. See left.

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

CHAPTER  
1**Chapter Test B** *continued*  
*For use after Chapter 1*

15. The volume of a rectangular box can be found with the formula  $V = \ell \cdot w \cdot h$ . Solve for  $\ell$ , and find the length of the rectangular box when  $w = 6$  inches,  $h = 7$  inches, and  $V = 210$  cubic inches.

**Solve the equation for  $y$ . Then find the value of  $y$  for the given value of  $x$ .**

16.  $\frac{2y}{5x} = 2 + 4x; x = 2$                       17.  $y + 0.5xy = x + 2; x = 1$

18. You travel on the highway at a speed of 60 miles per hour for 2.5 hours. How far did you travel?
19. A ferry connects an island to the mainland. The island is 47 miles away, and a one-way trip on the ferry takes 2.5 hours. What is the average speed of the ferry?
20. The table shows temperatures starting at 9 P.M. If the trend continues, what will the temperature be at 5 A.M.?

<b>Time</b>	9 P.M.	10 P.M.	11 P.M.	12 A.M.
<b>Temperature</b>	57°F	55°F	53°F	51°F

**Graph the inequality.**

21.  $x \leq -2.5$

22.  $-3 > x > -6$



**Solve the inequality.**

23.  $0.25x + 5 \geq 10$

24.  $12x + 21 < 3x - 6$

25.  $|5x + 5| > 15$

26.  $|3x + 5| \leq 20$

**Answers**

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

21. See left.

22. See left.

23. \_\_\_\_\_

24. \_\_\_\_\_

25. \_\_\_\_\_

26. \_\_\_\_\_