

Chapter 2 Re-Test Review**Short Answer****Solve the equation.**

1. $8d - 4d + 4d - 6 = 6d$

2. $1.3x + 1.1 = 3.7$

3. $-5d = -35$

4. $n + 3.2 = -6.3$

5. $v - \frac{9}{10} = \frac{1}{2}$

6. $9 = -d + 18$

7. $45 - 9 + 8c = 124$

8. $-\frac{y}{5} = -8$

9. $\frac{2}{3}x - 9 = 5$

10. $5(y + 6) = 70$

11. $3x - 3 = 5x - 9$

12. $-23 = a - 59$

13. $\frac{2}{3}x = 30$

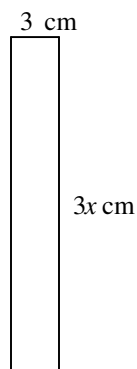
14. $14 = t + 8$

Solve the equation for the given variable.

15. $5.3t - 5.8m = 14; m$

16. $V = lwh; h$

17. The perimeter of the rectangle is 48 cm. Find the value of x .



18. Over the first five years of owning her car, Gina drove about 12,100 miles the first year, 5,692 miles the second year, 12,050 the third year, 11,000 the fourth year, and 13,200 the fifth year.
- Find the mean, median, and mode of this data.
 - Explain which measure of central tendency will best predict how many miles Gina will drive in the sixth year.

19. Two angles are complementary if the sum of their measures is 90° . $\angle P$ and $\angle Q$ are complementary. The measure of $\angle P$ is 63° . Write and solve an equation to find the measure of $\angle Q$.

20. Your math teacher allows you to choose the most favorable measure of central tendency of your test scores to determine your grade for the term. On six tests you earn scores of 78, 79, 91, 94, 75, and 78. What is your grade to the nearest whole number, and which measure of central tendency should you choose?

21. Find the mean and range.

19 30 16 14 14 35 34 22

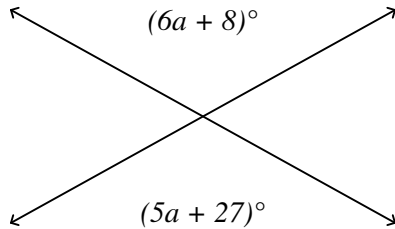
22. A camera manufacturer spends \$2,500 each day for overhead expenses plus \$7 per camera for labor and materials. The cameras sell for \$11 each.

- How many cameras must the company sell in one day to equal its daily costs?
- If the manufacturer can increase production by 50 cameras per day, what would their daily profit be?

23. A customer went to a garden shop and bought some potting soil for \$17.50 and 4 shrubs. The total bill was \$61.50. Write and solve an equation to find the price of each shrub.

24. John and 2 friends are going out for pizza for lunch. They split one pizza and 3 large drinks. The pizza cost \$10.50. After using a \$8.00 gift certificate, they spend a total of \$7.45. Write an equation to model this situation, and find the cost of one large drink.

25. a. Find the value of a .
b. Find the value of the marked angles.



not drawn to scale

Write and solve an equation to find the value of the variable.

26. 110, 119, 129, 122, x ; mean = 122

27. 4.8, 2.9, 7.9, 7.8, 4.7, y ; mean = 5.8

28. Steven wants to buy a \$600 bicycle. Steven has no money saved, but will be able to deposit \$30 into a savings account when he receives his paycheck each Friday. However, before Steven can buy the bike, he must give his sister \$90 that he owes her. For how many weeks will Steven need to deposit money into his savings account before he can pay back his sister and buy the bike?

29. Angela's average for six math tests is 84. On her first four tests she had scores of 87, 80, 81, and 89. On her last test, she scored 3 points lower than she did on her fifth test. What scores did Angela receive on her fifth and sixth tests?
