



30. You are exploring a cave in which rock formations called *stalagmites* grow up from the cave floor. The tour guide informs you that the tallest stalagmite in the cave is in a pool of water 48 feet deep, and the distance between the tip of the stalagmite and the surface of the water is 34 feet. Write an equation and solve it to find many feet tall the stalagmite is.

- 26.  $\frac{c}{-8} = -15$
- 27.  $\frac{z}{0.3} = 4.5$
- 28.  $-1.3 = \frac{a}{-6}$
- 29.  $5a - 2a = -27$
- 22.  $\frac{5}{8}x = 1$
- 23.  $-2 = \frac{2}{3}y$
- 24.  $\frac{2}{n} = -24$
- 25.  $\frac{x}{-5} = 0.5$
- 18.  $5a = 60$
- 19.  $-3k = -12$
- 20.  $17 = -w$
- 21.  $20b = 120$
- 14.  $x - -7 = 9$
- 15.  $y - 6 = 12$
- 16.  $-9 + w = 21$
- 17.  $14r = 42$
- 10.  $w + 16 = -10$
- 11.  $13 + y = -17$
- 12.  $n + -9 = 18$
- 13.  $x - 12 = 40$

Solve the equation. Make sure you show what you do to BOTH sides!! ☺

- 9.  $5 + n - p + 2n - 4$
- 8.  $5 - s(4 - 7) + 3s$
- 7.  $12y - 3(2 + 4y) + 6$
- 6.  $2(2t + 5 - 2t) + 8t$
- 5.  $x - 2 + 1 - 2y + 4x$

Simplify the expression.

1. The sum of 6 and a number. \_\_\_\_\_
2. 6 multiplied by the difference of 7 and a number. \_\_\_\_\_
3.  $\frac{1}{3}$  of a number is equal to -8 plus the number. \_\_\_\_\_
4. The product of 4 and a number is twice the sum of the number and 6. \_\_\_\_\_

Write the verbal phrase or sentence as a variable expression.



# Chapter 7 Quiz Review

Name: \_\_\_\_\_

Period: \_\_\_\_\_

