

# Extra Practice

## Chapter 1

Evaluate the expression.

- 1.1** 1.  $k + 9$  when  $k = 7$     2.  $21 - x$  when  $x = 3$     3.  $3.5 + t$  when  $t = 0.9$     4.  $y - \frac{3}{8}$  when  $y = \frac{7}{12}$   
5.  $\frac{m}{4}$  when  $m = 9.6$     6.  $1.5t$  when  $t = 2.3$     7.  $z^3$  when  $z = \frac{2}{3}$     8.  $p^4$  when  $p = 0.2$
- 1.2** 9.  $25 - 7 + 8$     10.  $67 - 3 \cdot 4$     11.  $8^2 \div 4 + 12$     12.  $9 + 6 \div 3$   
13.  $\frac{3^3 - 7}{2}$     14.  $\frac{1}{3}(7 - 5.5)^2$     15.  $3 + 4(3 + 24)$     16.  $\frac{3}{5}[27 - (2 + 5)]^2$

**1.3** Translate the verbal phrase into an expression.

17.  $\frac{3}{4}$  of a number  $m$     18. the quotient of a number  $x$  and 7  
19. the difference of a number  $y$  and 3    20. 6 more than 3 times a number  $n$

**1.3** Write an expression for the situation.

21. Number of minutes left in a 45 minute class after  $m$  minutes have gone by  
22. Number of meters in  $c$  centimeters

**1.4** Write an equation or an inequality.

23. The product of 12 and the difference of a number  $r$  and 4 is 72.  
24. The difference of a number  $q$  and 18 is greater than 10 and less than 15.

**1.4** Solve the equation using mental math.

25.  $d - 13 = 25$     26.  $12z = 96$     27.  $23 - m = 7$     28.  $\frac{k}{6} = 12$

**1.5** In Exercises 29 and 30, identify what you know and what you need to find out. You do *not* need to solve the problem.

29. One day the temperature in Quito, Ecuador, was  $20^\circ\text{C}$ . The temperature in Miami, Florida was  $75^\circ\text{F}$ . Which temperature was higher?  
30. On Monday, Katherine walked at a rate of 0.08 mile per minute for 40 minutes. On Tuesday, she walked at a rate of 0.07 mile per minute for 50 minutes. How far did Katherine walk altogether?

**1.6** 31. Identify the domain and range of the function.

Input	3	4	5	6
Output	9	11	13	15

**1.6** 32. The domain of the function  $y = 1.25x + 5$  is 2, 4, 6, and 8. Make a table for the function. Identify the range of the function.

**1.7** Graph the function.

33.  $y = x + 2$ ; domain: 0, 1, 2, and 3    34.  $y = 3x - 3$ ; domain: 1, 2, 3, and 4  
35.  $y = 1.5x$ ; domain: 0, 20, 40, and 60    36.  $y = \frac{1}{4}x + 2$ ; domain: 0, 4, 8, and 12