

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 29. For the following, identify what you know and what you need to find out. You do *not* need to solve the problem.

One day the temperature in Quito, Ecuador, was 20°C . The temperature in Miami, Florida was 75°F . Which temperature was higher?

1.6 30. Identify the number of significant digits in the measurements
(a) 25.03 m and (b) 1.620 ft.

1.7 31. Identify the domain and range of the function.

Input	3	4	5	6
Output	9	11	13	15

1.7 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.

1.8 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