**1-1 and 1-2 Additional Practice**Operations on Real Numbers, Solving Linear Equations

**1.** Which elements of the set of natural numbers are also irrational numbers?

**2.** When you subtract two positive integers, is the result always a positive integer?
Justify your answer.

**3.** For each of these expressions, draw a line or lines to show the subset(s) of the
real numbers it belongs to.

**a.** 0 − 10 Irrational Numbers

**b.** −3 +  Rational Numbers

**c.** Integers

**d.** Whole Numbers

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| **4. Order from least to greatest.**  |

**5.** To put a narrow border around a square photo, Alicia has 32 inches of trim.
The area of the photo is 60 square inches. Will she have enough trim for all
four sides of the square? Explain how you decided.

Solve each equation.

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| **6.** 5*h* − 13 = 12 | **7.** −8 = 3*y* − 2 | **8.**  |
| **9.** −3*d* + 10 = 43 | **10.**  | **11.** 8(*n* + 2) = 24 |
| **12.** *x* − 2(*x* + 10) = 12 | **13.** −15 = 5(3*q* − 10) − 5*q* | **14.** −5(*x* − 3) = −25 |

**For Items 15–17, write and solve a linear equation to match each situation.**

**15.** The sum of three consecutive integers is 78. What are the three integers?

**16.** Olivia ate at the same restaurant four times. Each visit she ordered a salad and
left a $1.50 tip. She spent a total of $54. Find the cost *c* of each salad.

**17.** Renaldo catches the bus at 4:00 p.m. to ride 3.2 miles from his house to the
dentist’s office. He arrives at 4:30 p.m., for a one-hour appointment. Then he
rides a bus traveling at the same rate of speed for 4.8 miles to the soccer field.
Is he on time for his 6:30 p.m. soccer practice? Explain.