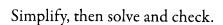
LESSON PRACTICE



1.
$$-3A - 5 + 4A - 6 + 2A = 19$$
 2. $8B - 6 + 5B - 3 - 3B = 41$

2.
$$8R - 6 + 5R - 3 - 3R = 41$$

$$3. -5Y + 3 - 6Y + 2Y + 4 = 13$$

3.
$$-5Y + 3 - 6Y + 2Y + 4 = 13$$
 4. $8Q - Q + 7 - 4 - 3Q = 7 + 4 \times 10$

5.
$$8M - 4M - 6 - 3 + 5M = 8^2 - 1$$
 6. $7C - 4C + 5 - 8 + C = 5^2 + 4$

6.
$$7C - 4C + 5 - 8 + C = 5^2 + 4$$

7.
$$11A - 4A - 18 = 2A + A + 10$$

7.
$$11A - 4A - 18 = 2A + A + 10$$
 8. $2B - 10B - 15 + 5 = 8B - 40 - 4B - 6$

9.
$$3C - 6 + 2C = 10C - 2C + 6$$
 10. $2D - 8 - 5D = -3D - 2D + 6$

10.
$$2D - 8 - 5D = -3D - 2D + 6$$

$$R + R + R + 6 = 6R + 5 - 2R + 9$$

13.
$$-2C + 12 = 2C - 6 + 6C - 12$$

13.
$$-2C + 12 = 2C - 6 + 6C - 12$$
 14. $10X - 3X - 9 + 3 - X = 51 \div 3 + 1$

SYSTEMATIC REVIEW

Solve for the unknown.

1.
$$X + 3 = 9$$

2.
$$X + 6 = 10$$

3.
$$2X + 5 = 11$$

4.
$$4Q - 2 = 10$$

5.
$$4X + 2 = 2X + 8$$

6.
$$3Y + 5 = 2Y + 7$$

7.
$$Q + 4 = 3Q - 6$$

8.
$$2R + 8 = 3R - 2$$

Larger or smaller? (Use <, >, or = in the oval.)

Solve.

11.
$$(-3) \cdot 4 + 6^2 \cdot (-3) + 5^2 =$$

12.
$$(14 - 9 + 2^2) - (3 \div 6 \cdot 2^2) =$$

13.
$$\frac{4}{3} \times \frac{6}{10} \div \frac{2}{3} =$$

14.
$$(.17)(.8) =$$

15.
$$(-8)(-7) =$$

16.
$$(-4)^2 =$$



QUICK TIP

The least common multiple (LCM) is useful for simplifying some equations before solving.

EXAMPLE 1 Solve
$$\frac{3}{4}A + \frac{1}{2} = \frac{7}{10}$$

 $4 = 2 \times 2, 2 = 2, 10 = 2 \times 5$
So LCM = $2 \times 2 \times 5 = 20$

$$(20)^{\frac{3}{4}} A + (20)^{\frac{1}{2}} = (20)^{\frac{7}{10}}$$

$$15A + 10 = 14$$

$$A = 4/15$$

Use the LCM of the denominators to simplify before solving for the unknown.

17.
$$\frac{1}{2} + \frac{2}{3} = \frac{1}{4}X$$

18.
$$\frac{3}{5}X + \frac{3}{4} = 1\frac{1}{2}$$

19.
$$\frac{1}{9}X + \frac{2}{3} = \frac{1}{5}$$

$$20. \ \frac{3}{8} - \frac{1}{5}X = \frac{3}{4}$$

SYSTEMATIC REVIEW

Solve for the unknown.

1.
$$Y - 3 = 10$$

2.
$$2B - 5 = 13$$

3.
$$3C + 6 = -9$$

4.
$$2D - 5 = 1$$

5.
$$4E - 3 = -3$$

6.
$$3X + 8 = -2X - 2$$

7.
$$2Y - 2 = 3Y - 6$$

8.
$$Z + 8 = 2Z + 18$$

Larger or smaller? (Use <, >, or = in the oval.)

9.
$$|3 \times 2 \times (-2)| \bigcirc 24 \div (-3)$$

9.
$$|3 \times 2 \times (-2)|$$
 24 ÷ (-3) 10. $|17 - 3 - 20|$ $|7 + 0 + 1|$

Solve.

11.
$$[(6-2) \times 5^2 - 10] \div 5^2 =$$

12.
$$(-7-6)^2 - (4+5-3)^2 =$$

13.
$$\frac{5}{6} \times \frac{3}{7} \div \frac{2}{3} =$$

14. How many groups of 12¢ are there in \$1.68?

Use the answer to #15 to simplify #16, and then solve for X.

Hint: First make improper fractions.

16.
$$1\frac{1}{5}X + \frac{7}{10} = 2\frac{1}{2}X$$



QUICK TIP

The LCM may also be used to simplify equations involving decimals.

EXAMPLE 1 Solve .05X - .35 = 2.7 If the decimals were written as fractions, the denominators would be 100 and 10. The LCM is 100.

Multiply each term by
$$100 \rightarrow (100).05X - (100).35 = (100)2.7 \rightarrow 5X - 35 = 270$$

 $X = 61$

EXAMPLE 2 Solve
$$.2X + 5 = 2.4$$

Multiply each term by $10 \rightarrow (10).2X + (10)5 = (10)2.4$
 $2X + 50 = 24 \rightarrow X = -13$

Use the LCM to make whole numbers before solving for the unknown.

17.
$$.83 + .04X = .325$$

$$18. .18 + .2X = .17$$

19.
$$.8X + 1.3 = 7 + .24$$

$$20.8.2 - 4 = .08X$$