

# 1-3 Practice

## Solving Equations

Solve each equation.

1.  $14 = 8 - 6r$

2.  $9 + 4n = -59$

3.  $\frac{3}{4} - \frac{1}{2}n = \frac{5}{8}$

4.  $\frac{5}{6}c + \frac{3}{4} = \frac{11}{12}$

5.  $-1.6r + 5 = -7.8$

6.  $6x - 5 = 7 - 9x$

7.  $5(6 - 4v) = v + 21$

8.  $6y - 5 = -3(2y + 1)$

9.  $3(3m - 2) = 2(3m + 3)$

10.  $6(3a + 1) - 30 = 3(2a - 4)$

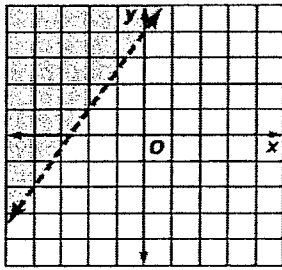
11.  $\frac{1}{2} + \frac{3}{8}y = \frac{5}{12} + \frac{5}{8}y$

12.  $3(x - 2y) = 12$

13.  $-9y - 5x = 23$

14.  $-2(x + 4) + 5y = 3y + 7$

67. The graph shows the solution of which inequality?



- A  $y < \frac{2}{3}x + 4$
- B  $y > \frac{2}{3}x + 4$
- C  $y < \frac{3}{2}x + 4$
- D  $y > \frac{3}{2}x + 4$

68. SAT/ACT What is  $1\frac{1}{3}$  subtracted from its reciprocal?

- F  $-\frac{2}{3}$
- G  $-\frac{7}{12}$
- H  $-\frac{1}{12}$
- J  $\frac{1}{4}$
- K  $\frac{3}{4}$

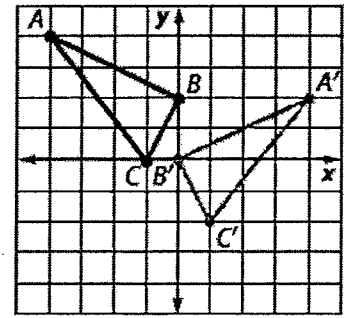
71. Simplify  $3x + 8y + 5z - 2y - 6x + z$ . (Lesson 1-2)

72. BAKING Tamera is making two types of bread. The first type of bread needs  $2\frac{1}{2}$  cups of flour, and the second needs  $1\frac{3}{4}$  cups of flour. Tamera wants to make 2 loaves of the first recipe and 3 loaves of the second recipe. How many cups of flour does she need? (Lesson 1-2)

73. LANDMARKS Suppose the Space Needle in Seattle, Washington, casts a 220-foot shadow at the same time a nearby tourist casts a 2-foot shadow. If the tourist is  $5\frac{1}{2}$  feet tall, how tall is the Space Needle? (Lesson 0-7)

74. Evaluate  $a - [c(b - a)]$ , if  $a = 5$ ,  $b = 7$ , and  $c = 2$ . (Lesson 1-1)

69. GEOMETRY Which of the following describes the transformation of  $\triangle ABC$  to  $\triangle A'B'C'$ ?



- A a reflection across the  $y$ -axis and a translation down 2 units
- B a reflection across the  $x$ -axis and a translation down 2 units
- C a rotation  $90^\circ$  to the right and a translation down 2 units
- D a rotation  $90^\circ$  to the right and a translation right 2 units

