

## Chapter 1 Practice Test

NAME \_\_\_\_\_

DATE \_\_\_\_\_

1

1. The equation  $3x - 4 = 11$  is solved as shown. Describe the inverse operations used in each step.

$$3x - 4 = 11$$

Step 1:  $3x - 4 + 4 = 11 + 4$

Step 2: 
$$\begin{aligned} 3x &= 15 \\ \frac{3x}{3} &= \frac{15}{3} \\ x &= 5 \end{aligned}$$

Solve each equation.

2.  $2x - 7 = 19$

3.  $\frac{2}{3}x - 4 = 1\frac{1}{4}$

4. Determine if there is one solution, no solution, or an infinite number of solutions.

$$2(3x + 4) - (x - 8) = 3(4x + 2) - 7x + 10$$

5. Monica bought 3 types of fruit for a fruit salad. She paid twice as much for blueberries as for oranges, and \$1.50 less for strawberries than for blueberries.

- a. Define a variable and write algebraic expressions to represent the amount she spent on each type of fruit.

1

- b. If the total cost was \$12.25, how much did Monica spend on each type of fruit?

Solve and check each equation.

6.  $\frac{6(2x - 1)}{5} = -18$

7.  $\frac{-2(5x + 4)}{3} = -3(3x + 2) - \frac{7}{3}$