Algebra 1 6.3
Solve systems of equations by elimination system of equations solve substitution method zero pair additive inverse addition property of equality whiteboards

elimination

The series pairs

Quiz 6.1-6.2

Sy

- 2x

- 5y

## **Guided**Practice

**1A.** 
$$-4x + 3y = -3$$
  
 $4x - 5y = 5$ 

$$-\frac{4}{4} \times +\frac{5}{3} = -\frac{5}{3}$$

$$-\frac{4}{4} \times = 0$$

$$-\frac{4}{4} \times = 0$$

**2.** 
$$8x + 5y = 38$$
  $-8x + 2y = 4$ 

$$8x + 5.6 = 38$$
 $8x + 30 = 38$ 
 $-30 = 30$ 
 $8x = 8$ 

## **Guided**Practice

3. Solve the system of equations.

$$8b + 3 - 1 = 11 
8b + 3c = 11 
8b + 7c = 7$$

$$8b = 14 
4c = -4$$

$$4c = -4$$

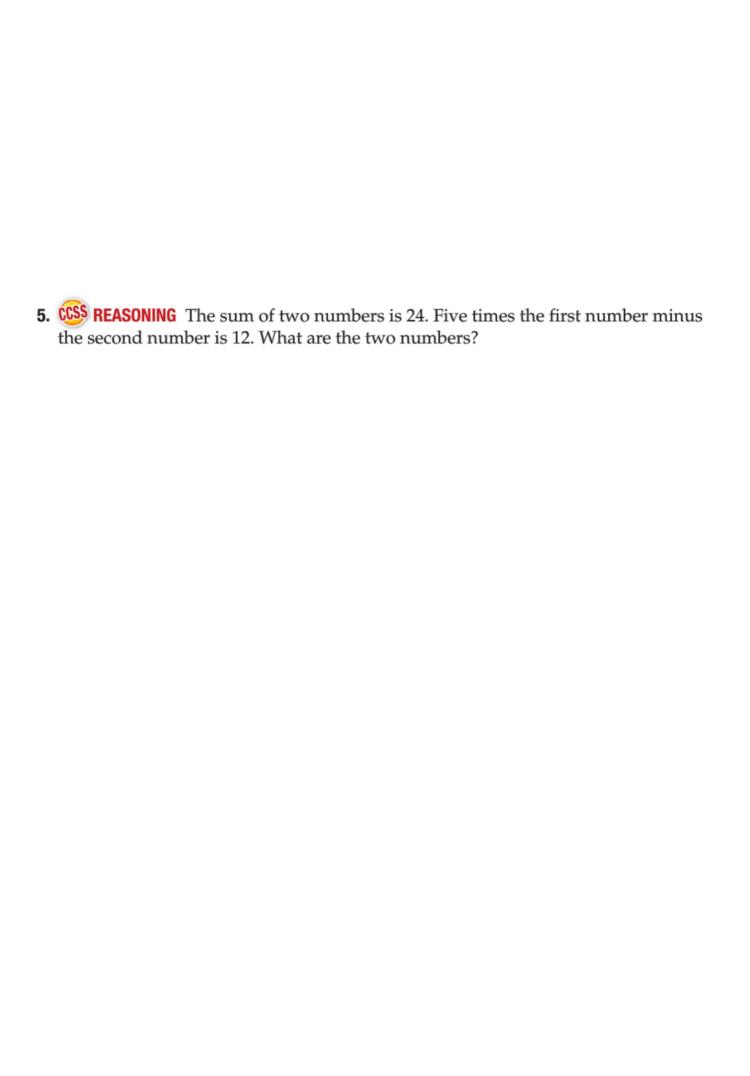
$$5c = -1$$

system of equations. 
$$2t + 5r = 6$$
  
 $9r + 2t = 22$ 



## **Example 2** Write and Solve a System of Equations

Negative three times one number plus five times another number is -11. Three times the first number plus seven times the other number is -1. Find the numbers.



## Whiteboards

**2.** 
$$8x + 5y = 38$$
  
 $-8x + 2y = 4$ 

**8.** 
$$y + z = 4$$
  $y - z = 8$ 

1. 
$$5m - p = 7$$
  
 $7m - p = 11$ 

$$37f + 3g = -6$$
$$7f - 2g = -31$$

**4.** 
$$6a - 3b = 27$$
  
 $2a - 3b = 11$