Solve Systems of Equations by Elimination 7.4 Practice

Solve each system of equations by eliminating a variable.

1.
$$2x + 3y = 6$$

 $x + 2y = 5$

2.
$$2m + 3n = 4$$

 $-m + 2n = 5$

3.
$$3a - b = 2$$

 $a + 2b = 3$

4.
$$4x + 5y = 6$$

 $6x - 7y = -20$

5.
$$4c - 3d = 22$$

 $2c - d = 10$

6.
$$3x - 4y = -9$$

 $x + 3y = -10$

7.
$$4s - t = 9$$

 $5s + 2t = 8$

8.
$$4a - 3b = -8$$
 $2a + 2b = 3$

9.
$$2x + 2y = 5$$

 $4x - 4y = 10$

10.
$$6x - 4y = -8$$

 $4x + 2y = -3$

11.
$$4x + 2y = -5$$

 $-2x - 4y = 1$

12.
$$2x + y = 3.5$$

 $-x + 2y = 2.5$

13. GARDENING The length of Sally's garden in 4 meters greater than 3 times the width. The perimeter of her garden is 72 meters. What are the dimensions of Sally's garden?

14. Anita is $4\frac{1}{2}$ years older than Basilio. Three times Anita's age added to six times Basilio's age is 36. How old are Anita and Basilio?

Worksheet 422

Solve the system of equations using the method of your choice.

1.
$$x + 2y = 3$$

 $x + y = 1$

2.
$$m + 6n = -8$$
 $m = 2n + 8$

3.
$$a - b = 6$$
 $a = 2b + 7$

4.
$$4x + y = 15$$

 $-x - 3y = -12$

5.
$$3c - d = 14$$
 $c - d = 2$

6.
$$x + 2y = -9$$
 $y = 4x$

7.
$$4x = 2y - 10$$

 $x + 2y = 5$

8.
$$x = -2y$$

 $4x + 4y = -10$

$$9. \ 2s - 3t = 42$$
$$3s + 2t = 24$$

10.
$$4a - 4b = -10$$

 $2a + 4b = -2$

11.
$$4x + 10y = -6$$
 $-2x - 10y = 2$

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

 $-x - y = 0$