

5.3 Practice B

Solve the system of linear equations by elimination.

1. $3x - y = 0$
 $-3x + 5y = 0$

2. $2x - 4y = -2$
 $2x + 3y = -16$

3. $3x - 5y = 9$
 $6x - 6y = 6$

4. You purchase 5 pounds of apples and 2 pounds of oranges for \$9. Your friend purchases 5 pounds of apples and 6 pounds of oranges for \$17. Write a system of linear equations that represents this situation. Then find the price of apple and oranges per pound.

5. A 100-point test contains a total of 20 questions. The multiple choice questions are worth 3 points each and the short response questions are worth 8 points each. Write a system of linear equations that represents this situation. Then find how many multiple choice and short response questions were on the test.

6. You and your friend are selling magazine subscriptions. You sell 8 fewer magazine subscriptions than your friend. Together you sell 42 magazine subscriptions. Write a system of linear equations that represents this situation. How many magazine subscriptions did you sell; how many did your friend sell?

Solve the system of linear equations by elimination.

7. $2x + 5y = -3$

$$3x - y = 21$$

8. $2y = -5x - 3$

$$4x - 2 = -6y$$

9. $3y = x - 6$

$$2x = 3y + 3$$

10. Your friend rents 10 chairs and 2 tables for \$300. Another friend rents 8 chairs and 4 tables for \$360. You want to rent 12 chairs and 3 tables. How much do you expect to pay?