

LESSON
11-3**Solving Linear Systems by Adding or Subtracting****Practice and Problem Solving: A/B****HINT: YOU MAY NEED TO MULTIPLY AN EQUATION BY -1****Solve each system of linear equations. Check your answer.**

1. $x - 5y = 10$
 $2x + 5y = 5$

2. $x + y = -10$
 $5x + y = -2$

3. $4x + 10y = 2$
 $-4x + 8y = 16$

4. $-3x - 7y = 8$
 $3x - 2y = -44$

5. $-x + 4y = 15$
 $3x + 4y = 3$

6. $-4x + 11y = 5$
 $4x - 11y = -5$

7. $-x - y = 1$
 $-x + y = -1$

8. $3x - 5y = 60$
 $4x + 5y = -4$

Write a system of equations to solve.

9. A plumber charges an initial amount to make a house call plus an hourly rate for the time he is working. A 1-hour job costs \$90 and a 3-hour job costs \$210. What is the initial amount and the hourly rate that the plumber charges?

10. A man and his three children spent \$40 to attend a show. A second family of three children and their two parents spent \$53 for the same show. How much does a child's ticket cost?

$$\begin{aligned}x + 3y &= 40 \\2x + 3y &= 53\end{aligned}$$

LESSON
11-4**Solving Linear Systems by Multiplying First****Practice and Problem Solving: A/B**

Solve each system of equations. Check your answer.

1.
$$\begin{cases} -3x - 4y = -2 \\ 6x + 4y = 3 \end{cases}$$

2.
$$\begin{cases} 2x - 2y = 14 \\ x + 4y = -13 \end{cases}$$

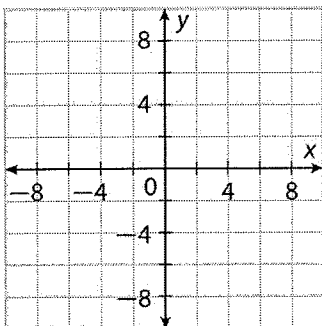
3.
$$\begin{cases} y - x = 17 \\ 2y + 3x = -11 \end{cases}$$

4.
$$\begin{cases} x + 6y = 1 \\ 2x - 3y = 32 \end{cases}$$

5.
$$\begin{cases} 3x + y = -15 \\ 2x - 3y = 23 \end{cases}$$

Solve the system of equations using elimination.
Check your answer by graphing.

7.
$$\begin{cases} 4x - 3y = -9 \\ 5x - y = 8 \end{cases}$$



Solve.

9. Ten bagels and four muffins cost \$13. Five bagels and eight muffins cost \$14. What are the prices of a bagel and a muffin?

$$\begin{aligned} 10x + 4y &= 13 \\ 5x + 8y &= 14 \end{aligned}$$

10. John can service a television and a cable box in one hour. It took him four hours yesterday to service two televisions and ten cable boxes. How many minutes does John need to service a cable box?
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- _____

Answer Keys.

Please make sure this worksheet is done by Monday.

LESSON 11-3

Practice and Problem Solving: A/B

1. $(5, -1)$
2. $(2, -12)$
3. $(-2, 1)$
4. $(-12, 4)$
5. $(-3, 3)$
6. infinitely many solutions
7. $(0, -1)$
8. $(8, -7.2)$
9. initial amount: \$30; hourly rate: \$60
10. \$9

LESSON 11-4

Practice and Problem Solving: A/B

1. $\left(\frac{1}{3}, \frac{1}{4}\right)$
2. $(3, -4)$
3. $(-9, 8)$
4. $(13, -2)$
5. $(-2, -9)$
6. $(-10, -1)$
7. $(3, 7)$
8. $\left(\frac{5}{3}, 2\right)$

9. Bagel: \$0.80; muffin: \$1.25
10. 15 minutes