

Warm Up: 8 Minute Check-Up

Complete 8-Minute Check Up Now

Speak Like A Mathematician

elimination: a method that involves _____ a variable by
_____ the individual _____ within a system of
equations.

Example 1:

Use Elimination to solve each system of equations.

$$\begin{aligned} 3x + 5y &= 11 \\ 5x - 5y &= 5 \end{aligned}$$

$$\begin{aligned} -x + 3y &= -8 \\ 2x - 3y &= -8 \end{aligned}$$

$$\begin{aligned} 4x + 6y &= 8 \\ 4x - 2y &= 9 \end{aligned}$$

$$\begin{aligned} 3x + 6y &= 30 \\ 5x + 6y &= 6 \end{aligned}$$

$$\begin{aligned} -17x - 13y &= 57 \\ -17x + 2y &= -20 \end{aligned}$$

$$\begin{aligned} 5x + 13y &= 20 \\ -5x - 3y &= 30 \end{aligned}$$

3 Ways to Solve Systems

1)

2)

3)

Example 2: Write and Solve a System of Equations

- A) Two times a number x minus six times another number y is negative six.
Negative two times a number x plus five times another number y is eighteen. Write and solve a system of equations to find the numbers.
- B) Negative four times a number plus four times another number is zero.
Four times a number minus seven times another number is eighteen.
Write and solve a system of equations to find the numbers.
- C) Mei and Kara build computers from parts and sell them to make a profit. Mei can build a computer in 0.9 hours, and Kara can build one in 1.2 hours. During a typical week, Mei and Kara spend a total of 15 hours building computers. One week, Mei builds twice as many computers than she normally does and the two spend a total of 24 hours on their project. How many computers do Mei and Kara make during a typical week?