

7.3 The Elimination Method

Need To Know



- Review of the substitution method
- The idea of the elimination method
- The steps for the elimination method
- Apply

Review Substitution - disadvantages

$$3x + 5y = 4$$

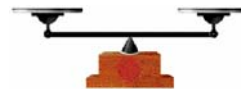
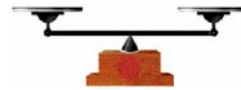
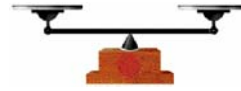
$$-7x + 3y = 10$$

Solve the System by Elimination

$$x + y = 6$$

$$2x - y = 3$$

Why it works



Solve the System by Elimination

$$3x - y = 7$$

$$x + 2y = 7$$

Steps for Elimination

1. Put equations in _____ and _____ to eliminate.
2. _____ one or both equations to _____ in one variable.
3. _____ equation and solve.
4. Back substitute first answer to find solution for the other variable.
5. Check your ordered pair in both equations.



Solve the System by Elimination

$$3x + 2y - 3 = 0$$

$$2x = -5y + 13$$

Steps for Elimination

1. Put in standard form
2. Set up opposites
3. Add equation & solve
4. Solve for other variable
5. Check



Solve the System by Elimination

$$\frac{1}{3}x + \frac{1}{2}y = 1$$

$$x + \frac{3}{4}y = 0$$

Steps for Elimination

1. Put in standard form
2. Set up opposites
3. Add equation & solve
4. Solve for other variable
5. Check



Solve the System by Elimination

$$a - 3b = 2$$

$$-3a + 9b = 2$$

Steps for Elimination

1. Put in standard form
2. Set up opposites
3. Add equation & solve
4. Solve for other variable
5. Check

end

