

Name _____

Date _____

Solving Systems by Substitution

Steps

1. One equation will have either x or y by itself, or can be **solved for x or y** easily.
2. **Substitute** the expression from Step 1 into the other equation **and solve** for the other variable.
3. **Substitute** the value from Step 2 into the equation from Step 1 and solve.
4. Your solution is the **ordered pair** formed by x & y .
5. **Check the solution** in each of the original equations.

Choose the best variable to isolate in order to solve by substitution. **Set up but Do Not Solve!**

1. $x = y - 5$
 $2x + 3y = 10$

2. $2x + y = 12$
 $3x - 4y = 17$

3. $x + 2y = 12$
 $3x - 4y = 17$

4. $5x + 2y = 2$
 $3x - y = 1$

Solve the system using substitution.

1. $x = -4$
 $3x + 2y = 20$

2. $3x + 2y = -12$
 $y = x - 1$

3. $2x - y = -6$
 $4x - y = 10$

4. $3x + 15y = -1$
 $x + 5y = 4$

5. $y = 4x - 49$
 $y = -2x + 23$

6. $-5y = -x + 10$
 $2x - 10y = 20$
