

Graphing

Substitution

elimination\*

Solving  
Systems  
using

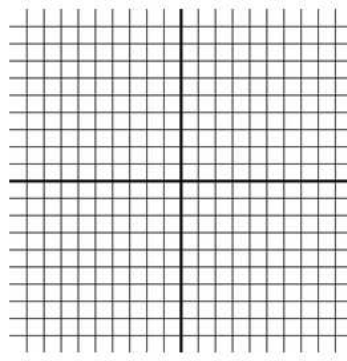
Solving  
Systems  
using

Solving  
Systems  
using

Retrieved from Julie Reulbach  
(MCC9-12.A.REI.1; MCC9-12.A.REI.3; MCC9-12.A.REI.5;  
MCC9-12.A.REI.6; MCC9-12.A.REI.12; MCC9-12.A.REI.11)

1. Graph each line.
2. The solution is the point of intersection.

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



When should you use graphing to solve?

1. Solve for one of the variables.
2. Substitute the expression you just found in for that variable in the other equation and solve.
3. Substitute the value for that variable into either equation to solve for the other variable.

$$y = 3x - 5$$
$$8x + y = -16$$

When should you use substitution to solve?

1. Create a match of either the x's or y's (if there isn't one already).
2. Add or subtract the two equations to eliminate either x or y.
3. Solve for the remaining variable, then substitute that value to solve for the other variable.

$$5x + 3y = -19$$
$$8x + 3y = -25$$

$$5x + 3y = 52$$
$$9x - 4y = 56$$

When should you use elimination to solve?