

Solving Linear Systems by Substitution

◦ Chapter 7 Section 2

Solve Using Substitution

o Steps:

- o 1. Choose a variable to solve for.
- o 2. Substitute that equation into the 2nd equation for the variable you solve for.
- o 3. Solve for the variable remaining.
- o 4. Plug that number in to either equation to get the 2nd variable.

Examples:

o 1. $3x + 2y = 7$
 $x - 2y = -3$

Examples:

o 2. $x + 2y = 7$
 $-x + 6y = -3$

Examples

o 3. $2x + y = 3$
 $3x + y = 0$

Examples:

o 4. $3x - y = 5$
 $4x + 2y = 10$

Examples:

$$y = 4x$$

o 5. $-2x + y = -4$