Section 7.2: Solving Linear Systems by Substitution EXAMPLES

When **variables are not x and y**, the final ordered pair solution the variables should be put in ***alphabetical order***

Solutions:

If variable = #: _____

If # ≠ #: _____

If # = #: _____

EXAMPLE 1: Solve the linear system by substitution.

If ONE equation is solved for a variable:

1) $\begin{cases} 2y + x = 19 \\ x = y + 4 \end{cases}$

2) $\begin{cases} n = -2m + 1 \\ 2m + n = -2 \end{cases}$

3) $\begin{cases} 3x - 5y = 22 \\ y = -5 \end{cases}$

4) $\begin{cases} d = -6c + 5 \\ -6c - d = 0 \end{cases}$

*If NO equation is solved for a variable, but at least one variable has a coefficient of **1***

5) $\begin{cases} x + y = 4 \\ 4x + y = 1 \end{cases}$

6) $\begin{cases} x - y = 2 \\ 7x - 7y = 14 \end{cases}$

7) $\begin{cases} -3a + b = 4 \\ -9a + 5b = -1 \end{cases}$

8) $\begin{cases} x + 3y = -3 \\ \frac{1}{3}x + y = 1 \end{cases}$

Textbook Pages:

Page 405 – 410
Page 426 – 431

Homework:

Examples 1 – 4:

Page 408 #17, 18, 21, 30

Examples 5 – 8:

Page 408 #19, 20, 22 – 29, 31 – 34
Page 430 #20 – 23