Linear Systems:

The last two classes we have solved linear systems _____ , by finding their

_____ ____ _____.

However, graphing isn't always the best method for finding an _____ solution.

Today: We are going to learn an algebraic method to solve linear systems called

_____.

Ex. 1 Solve the following linear systems.

a) $y = x + 1$ b) $y = 3x - 1$
          $3x + 2y = -3$ $y = -x + 7$

Step 1:   Step 1:

Step 2:   Step 2:

Step 3:   Step 3:

Ex. 2 Ben is offered two weekly salary plans:

Plan A: Plan B:

y = 850 + 0.04x   y = 800 + 0.06x

↗   ↖   ↗   ↖

a) Define each variable.

b) Solve by substitution.

c) For what amount of weekly sales are the salary plans the same? What is the weekly salary?

Try on your own:

Solve the following linear system by substitution:

$$y = -5x - 1$$
$$3x + 2y = 12$$

Homework: Worksheet