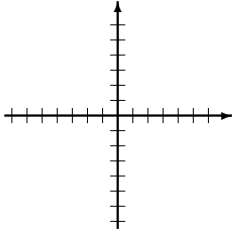


Linear Systems WS

Name:

1. (a) Solve graphically

$$\begin{aligned}x + y &= 7 \\x - y &= 1\end{aligned}$$



(b) Solve by substitution

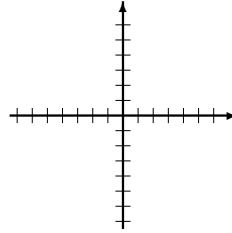
$$\begin{aligned}x + y &= 7 \\x - y &= 1\end{aligned}$$

(c) Solve by Elimination

$$\begin{aligned}x + y &= 7 \\x - y &= 1\end{aligned}$$

2. (a) Solve graphically

$$\begin{aligned}2x - y &= -3 \\3x + 5y &= 2\end{aligned}$$



(b) Solve by substitution

$$\begin{aligned}2x - y &= -3 \\3x + 5y &= 2\end{aligned}$$

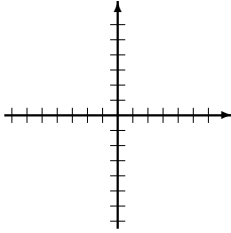
(c) Solve by Elimination

$$\begin{aligned}2x - y &= -3 \\3x + 5y &= 2\end{aligned}$$

3. (a) Solve graphically

$$4x + 3y = -1$$

$$x - 2y = 8$$



(b) Solve by substitution

$$4x + 3y = -1$$

$$x - 2y = 8$$

(c) Solve by Elimination

$$4x + 3y = -1$$

$$x - 2y = 8$$

These might have

no solution (inconsistent system),

one solution (consistent system),

or infinite solutions (dependent system)

inconsistent and dependent systems have the same slope

4.

$$x + y = 7$$

$$2x + 2y = 14$$

5.

$$3x + 2y = 1$$

$$6x - 4y = 3$$

6.

$$x + 2y = 3$$

$$2x - 3y = -1$$

7.

$$2x + 2y = 4$$

$$x - 3y = -2$$

8.

$$3x + 3y = 0$$

$$-2x - 4y = -2$$

9.

$$2x + y = 4$$

$$x - y = -1$$

10.

$$4x + 2y = 6$$

$$2x + y = 3$$