

Systems of Linear Equations in  
Two Variables

1. Determine whether the given  
ordered pair is a solution of the  
system

(similar to p.492 #2)

$(-2,3)$

$$5x + 4y = 2$$

$$7x - y = -17$$

2. Determine whether the given  
ordered pair is a solution of the  
system

(similar to p.492 #4)

$(1,5)$

$$8x - 2y = -2$$

$$7x + 3y = 10$$

3. Solve each system by the  
substitution method  
(similar to p.492 #8)

$$5x - 4y = 30$$

$$y = 2x - 9$$

4. Solve each system by the  
substitution method  
(similar to p.493 #14)

$$3x + 8y = 13$$

$$-x + 2y = -9$$

5. Solve each system by the  
substitution method  
(similar to p.493 #18)

$$y = \frac{-1}{4}x - 3$$

$$y = \frac{-5}{2}x + 7$$

6. Solve each system by the addition method  
(similar to p.493 #22)

$$5x + 4y = -13$$

$$2x - 4y = 6$$

7. Solve each system by the addition method  
(similar to p.493 #24)

$$-3x - 2y = -8$$

$$5x + y = 18$$

8. Solve each system by the addition method  
(similar to p.493 #28)

$$5x - 3y = 17$$

$$3x + 2y = 14$$

9. Solve each system by the addition method  
(similar to p.493 #30) - SETUP

$$-7x = 3y - 20$$

$$4y = 18 - 5x$$

10. Solve by the method of your choice. Identify systems with no solution and systems with infinitely many solutions, using set notation to expression their solution sets.  
(similar to p.493 #32)

$$8x + 4y = 3$$

$$y = -2x + 5$$

11. Solve by the method of your choice. Identify systems with no solution and systems with infinitely many solutions, using set notation to expression their solution sets.  
(similar to p.493 #34)

$$8x + 2y = 6$$

$$y = -4x + 3$$

12. Solve by the method of your choice. Identify systems with no solution and systems with infinitely many solutions, using set notation to expression their solution sets.  
(similar to p.493 #40) - SETUP

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

$$4x - y = 8$$