

1. If a problem involves (3) variables, you will need \_\_\_\_\_ equations to form a solvable system. (1 pt)

**#2-4, Is the point (2, -10) a solution to each system below?** (1 pt ea)

2.  $3x + 8y = -74$   
 $4x - y = 18$

3.  $3x - 2y = 26$   
 $x + y = 12$

4.  $-5y = 12 + 21x$   
 $2 + 3y = -14x$

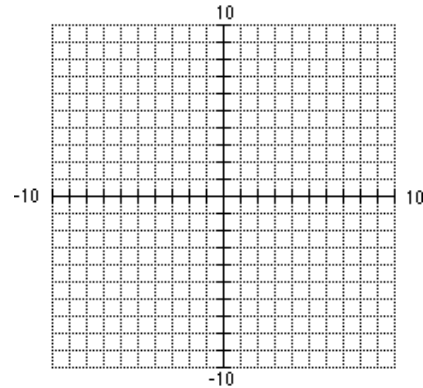
**#5-7, Graph the system to determine the solution.** (3 pt ea.)

5. **\*\* by hand \*\***  
 $y = -x + 1$   
 $y = 3x - 7$

6-7, **\*\* on Calculator \*\***

6.  $-x + 2y = 4$   
 $-3x + 4y = 4$

7.  $0.5x + y = 3$   
 $-0.95x - y = 1$



**#8-10, Solve each system using the substitution method. You MUST show your work.** (3 pt ea)

8.  $s = w + 2$   
 $2w + s = 17$

9.  $x - 2y = 0$   
 $x + y = 6$

10.  $m = 2n + 2.25$   
 $2m = 3n - 2$

**#11-14, Solve each system using the elimination method. You MUST show your work.** (2 or 3 pt ea)

11.  $2x + y = 10$   
 $5x - y = 11$

12.  $3x + 2y = 7$   
 $4x + 2y = -2$

13.  $2a - b = 17$   
 $3a + 4b = -13$

14.  $2x + 3y = 7$   
 $3x + 4y = 9$

#15-16, Write the (2) equations (2 pt) and then solve system using any method you wish (2 pt)

15. You order 2 tacos and 3 enchiladas at a Mexican restaurant. Your friend orders 3 tacos and 5 enchiladas. Your bill was \$7.80 and your friend's was \$12.70. How much was each taco and enchilada?

16. BHS Recycle Club has sold 176 bags of mulch for a fundraiser and made \$520.00. They did not sell any of the expensive cocoa mulch. Use the table to decide how many of each type of mulch they sold.

Mulch Prices (\$)	
Cocoa	4.75
Hardwood	3.50
Pine Bark	2.75