Chapter 7, Practice Quiz 1
Lessons 7.1, 7.2 and 7.3

Name: _____

Date: _____ Hour: _____

Skills Assessed:

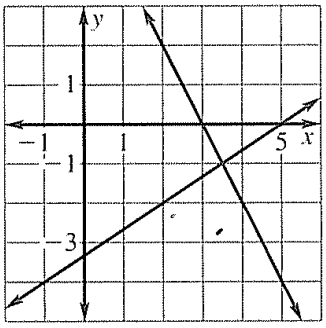
I can solve a system of linear equations by graphing, substitution and elimination (linear combination).
I can model a real-life situation using a linear system.

1.) Decide whether the ordered pair is a solution of the system of linear equations (YES or NO). Show your work. 1.) _____

(-5, 8) $3x - y = 11$
$x - y = -13$

2.) Use the graph to solve the system. Check your work algebraically. 2.) _____

$4x + 2y = 12$
$2x - 3y = 10$



3.) Solve for the indicated variable. Show your work. 3.) _____

$3x - y = 8$; y

4.) Which equation you would use to isolate a variable? Explain. 4.) _____

$-2x + y = 6$
$3x - 2y = 11$

5.) Use the substitution method to solve the linear system. 5.) _____

$2x - 3y = -14$
$3x - y = -7$

6.) Solve using elimination. Show your work. 6.) _____

$x - 2y = 8$
$-x + 5y = 17$

7.) Solve using elimination. Show your work. 7.) _____

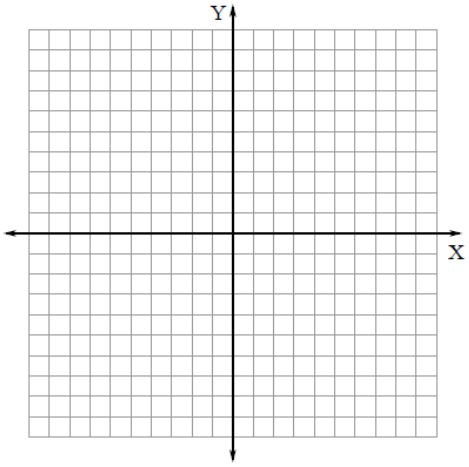
$3x + y = 16$
$3x - 4y = -19$

8.) Solve using elimination. Show your work. 8.) _____

$-x + 3y = 6$
$3x = -6y + 12$

9.) Graph and check to solve the linear system. Show your work. 9.) Solution: _____

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



For questions 10-12, write and solve a system of equations using any strategy.

10.) There are two different plumbing businesses. Business A charges $55 for a service call and $28 per hour for labor. Business B charges $70 for a service call plus an additional $23 per hour for labor. Let *x* represent the number of hours of labor and *y* represent the total cost. When will both companies charge the same amount? 10.) _____

11.) An office supply company sells two types of fax machines. They charge $150 for one of the machines and $225 for the other. If the company sold 22 fax machines for a total of $3900 last month, how many of each type were sold? 11.) _____

12.) The Smith family made an $800 downpayment and pays $75 a month for new furniture. At the same time, the Cooper family made a $500 downpayment and pays $95 a month for its new furniture. How many months will it be until the amounts they have paid are equal? 12.) _____