Name _____ Period _____ Date _____

What You Should Be Able To Do For the It's In The System Unit Test

Write each equation in Slope-Intercept and Standard Forms.

$6y = \frac{3}{5}x - 7$

$\frac{3}{2}x = 5y - \frac{1}{3}$

$4y - \frac{2}{7}x + 3 = 0$

Solve with substitution:

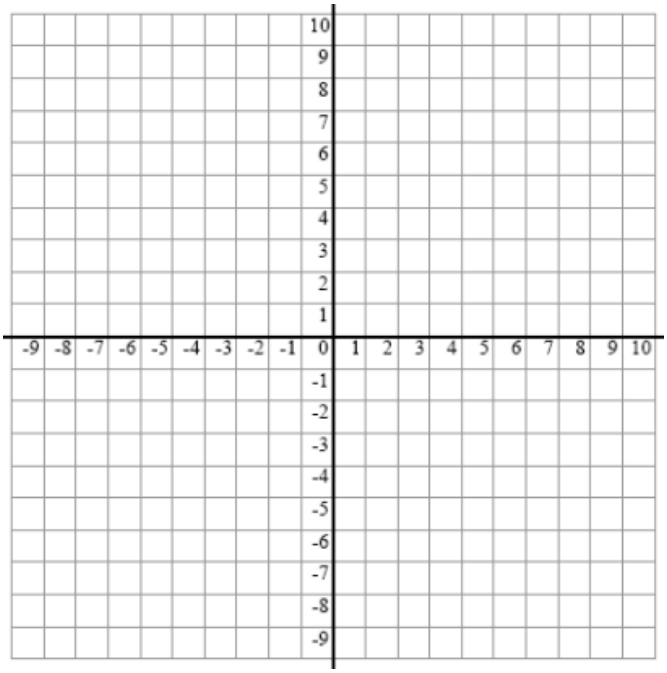
$$\begin{cases} -1 = 3y - x \\ 2x + 4y = 12 \end{cases}$$

Solve with combination/elimination:

$$\begin{cases} 2x - 5y = 15 \\ 3x + 7y = 8 \end{cases}$$

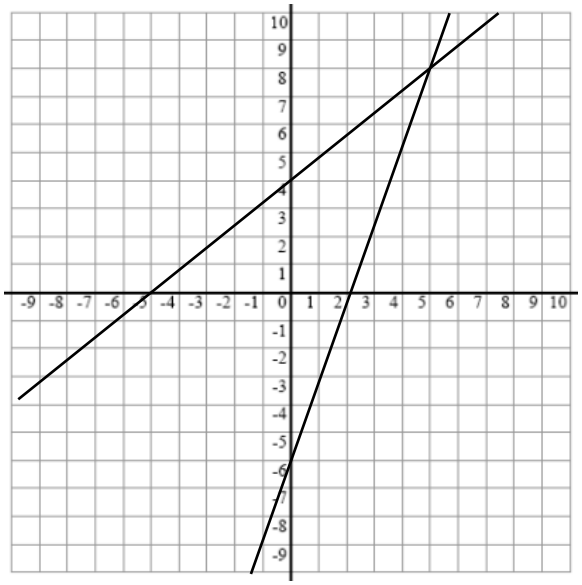
Find a common solution by graphing.

$$\begin{cases} 3x - 8y = 24 \\ y = -\frac{3}{5}x + 2 \end{cases}$$



Solve algebraically to find the exact solution.

Write the system of equations pictured below.



Write a system of equations with …

One solution (not the one above!)

No solutions

Infinite Solutions

For the following situations, define your variables, write, and solve the system.

Ms. Kitts works at a music store. Last week she sold 6 more than 3 times the number of CDs that she sold this week. Ms. Kitts sold a total of 110 CDs over the 2 weeks. How many CDs did she sell each week?

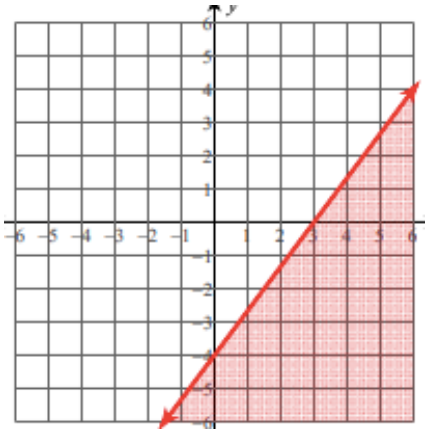
Chase and Sara went to the candy store. Chase bought 5 pieces of fudge and 3 pieces of bubble gum for a total of $5.70. Sara bought 2 pieces of fudge and 10 pieces of bubble gum for a total of $3.60. How much does a piece of fudge cost?

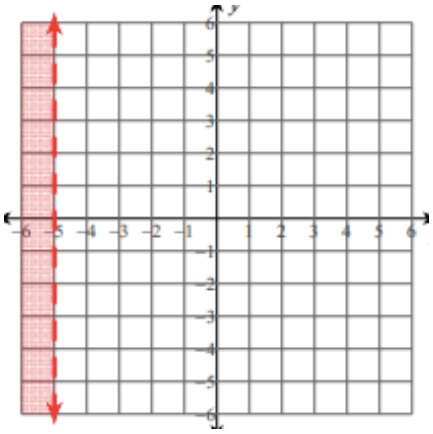
Solve for x and graph your solutions.

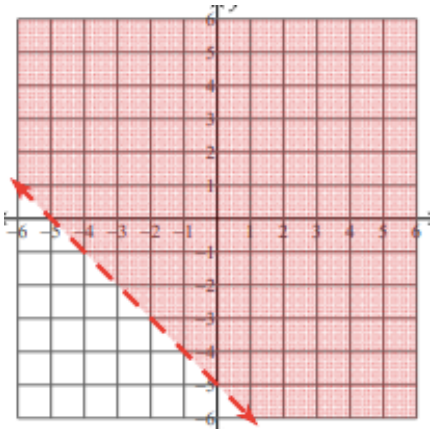
$$3(4-5x) \geq 4x-20$$

$$\frac{4x+3}{7}-5<3x-2$$

Write the equations for the inequalities graphed below.







A trailer can carry a maximum weight of 160 pounds and a maximum volume of 15 cubic feet. A microwave oven weighs 30 pounds and has 2 cubic feet of volume, while a printer weighs 20 pounds and has 3 cubic feet of space. If they have to bring more than one microwave, how many combinations of printers and microwaves can they carry?