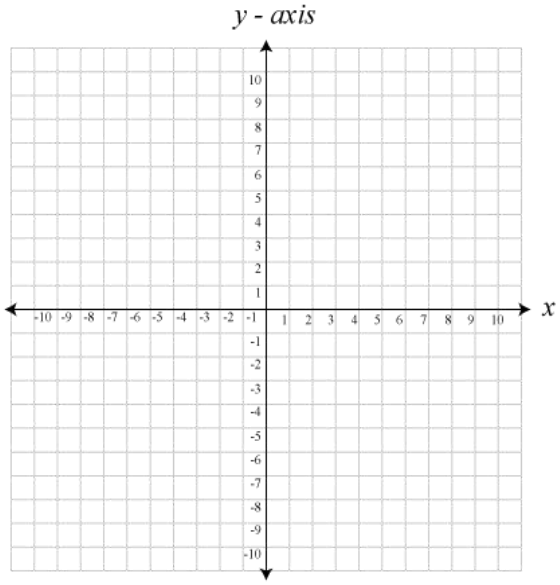
Math099 Week4 assignment

Solve each system by the method stated.

1. Solve systems #1 and #2 by graphing.

$$y = 4x - 3$$
$$y = \frac{1}{2}x + 4$$

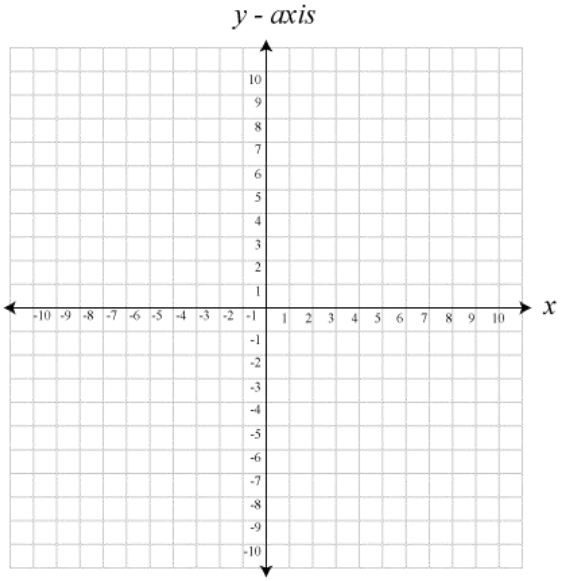
Answer:___**(**____,_____**)**____




**2.** $y = -\frac{2}{5}x + 6$

$x + y = 3$

Answer:___(____,_____)____



3. Solve the system by addition/subtraction. Show steps.

$$4x - 3y = 11$$
$$x + y = 8$$

Answer: ___(____,_____)____

Solve the system by substitution. Show steps.

$$3x + 4y = -140$$
$$y = \frac{2}{3}x + 50$$

Answer: ___(____,_____)____

For #5 and #6, solve each using a system of 2 variables. Be sure to define the variables. Show the system of equations used and steps to solution. Finish by clearly expressing your answer in terms of the question asked.

5. Four burgers and three milkshakes cost $37.95. Five burgers plus 6 milkshakes cost $50.25. Find the cost of each burger and each milkshake.

6. A walkway is made 1 metre wide around a square garden. The original area of the garden was decreased by 92 sq. metres to do this. Find the dimensions (= length and width) of the original garden.

7. Solve the system of inequalities on the grid provided. Use shading to show the solution.

$$y \geq \frac{3}{4}x - 7$$
$$x + y \leq 6$$
$$x \geq -5$$