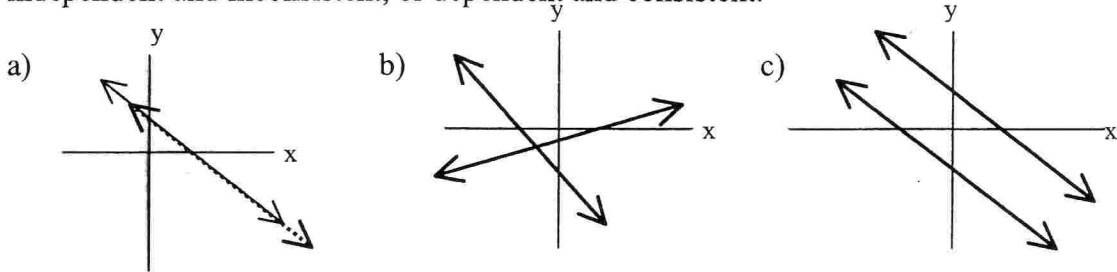
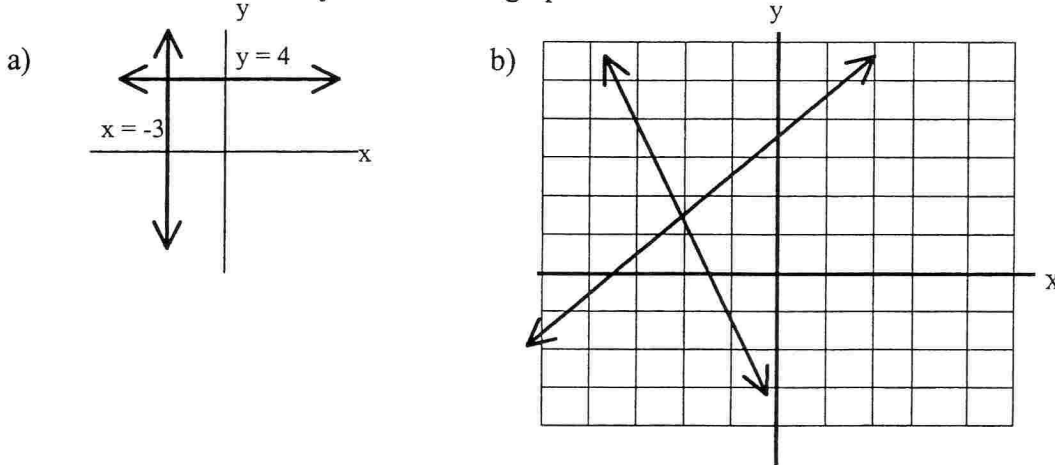


Worksheet ---- Systems of Equations

1. Classify the following systems as one of the following--- independent and consistent, independent and inconsistent, or dependent and consistent.



2. What is the solution to the systems whose graphs are shown below?



3. Solve the following systems:

a)
$$\begin{cases} 2x + 3y = 36 \\ x - 2y = -10 \end{cases}$$

b)
$$\begin{cases} 4x - 6y = 12 \\ 2x - 3y = 9 \end{cases}$$

c)
$$\begin{cases} x + \frac{3}{2}y = 2 \\ y = \frac{x}{4} - \frac{13}{4} \end{cases}$$

4. Solve the following by using a system of equations. Lomasi's two student loans totaled \$12,000. One of her loans was at 6% simple interest and the other at 9%. After one year, Lomasi owed \$855 in interest. What was the amount of each loan?

5. Solve the following system:
$$\begin{cases} x + y + z = 433 \\ 2x + 3y - z = 1047 \\ 3x - 4y + 2z = 472 \end{cases}$$

6. Fargo's Pizza Co. sells three kinds of large pizzas---pepperoni, beef, and vegetable. Alfred went to Fargo's and bought one kind of each pizza and his bill was \$27.00. Alicia went to Fargo's and bought 2 pepperoni pizzas, 1 beef pizza, and 3 vegetable pizzas and her bill was \$52.50. Juan went to Fargo's and bought 1 pepperoni pizza, 3 beef pizzas, and 2 vegetable pizzas and his bill was \$52.50. Assuming that they all bought large pizzas, use a system of equations to find the cost of each kind of pizza.