

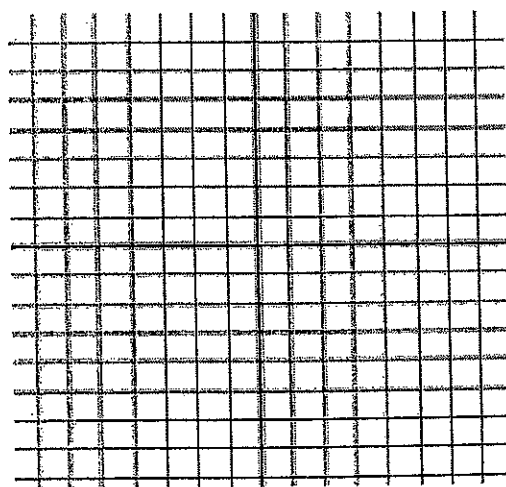
3.3 Graphing and Solving Systems of Linear Inequalities

Ex. 1 Is $(4, 2)$ a solution?

$$3x - y \leq 2; 2x + y \leq 1$$

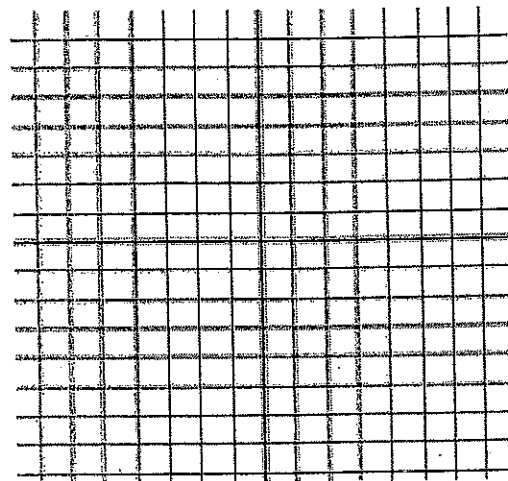
Ex. 2 Graph and find a solution.

$$4x > y; x \leq 4$$



Ex. 3 Graph and find a solution.

$$x - 2y \leq 3; 3x - y < 4$$

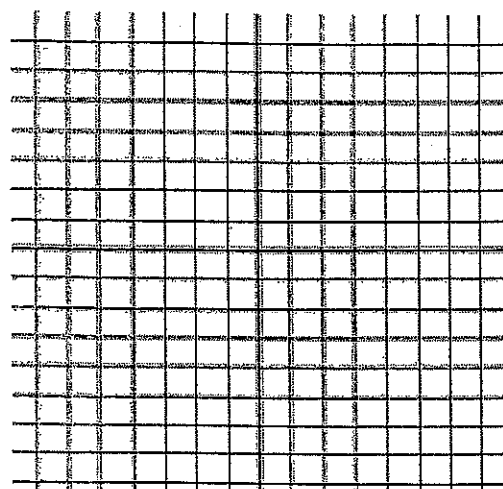


Ex. 4 Graph the system.

$$x \leq 0$$

$$y \geq 0$$

$$x - y \geq -2$$



Problem 3 Using a System of Inequalities

Got It? A pizza parlor charges \$1 for each vegetable topping and \$2 for each meat topping. You want at least five toppings on your pizza. You have \$10 to spend on toppings. How many of each type of topping can you get on your pizza?

15. Complete the model to write a system of inequalities.

Relate	{	number of vegetable toppings	plus	number of meat toppings	is at least	<input type="text"/>
		cost of vegetable toppings	plus	cost of <input type="text"/>	is	<input type="text"/> 10

Define Let v = the number of vegetable toppings.
Let m = the number of meat toppings.

Write	{	<input type="text"/> v	+	<input type="text"/>	<input type="text"/> 2	<input type="text"/>
		<input type="text"/>	+	<input type="text"/>	<input type="text"/>	<input type="text"/>