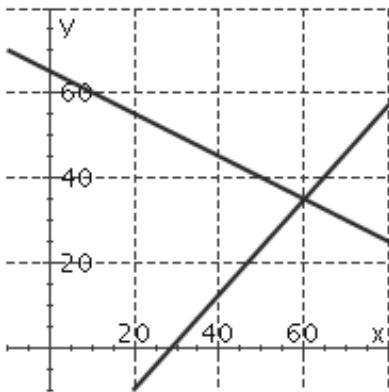1 Solve the system of equations using the graph given. Verify algebraically that your solution satisfies both equations.

$$19x - 17y = 545$$
$$16x + 32y = 2080$$

_____

2 There were 42 passengers on an airplane flight for which the first-class fare was $480 and the tourist fare was $340. The revenue for the flight totaled $144000. Write algebraic expressions to fill in the table.

	Number of tickets	Cost per ticket	Revenue
First-class	x	$480	?
Tourist	y	$340	?
Total	?	$820	?

3 Rani kayaks downstream for 45 minutes and travels a distance of 6000 meters. On the return journey upstream, she covers only 4800 meters in 45 minutes. How fast is the current in the river, and how fast would Rani kayak in still water? (Give your answers in meters per minute.)

4 Solve the system.

$$x = \frac{4}{5}y + 2$$
$$5x - 4y = 10$$

If the system is dependent or inconsistent, indicate this.

5 A woolen mill can produce $400x$ yards of fine suit fabric if they can charge x dollars per yard. Their clients in the garment industry will buy 4500 - 100x yards of wool fabric at a price of x dollars per yard. Find the equilibrium price and the amount of fabric that will change hands at that price.

6 Solve the system of equations by graphing. Verify algebraically that your solution satisfies both equations.

$y = 2 - 2.4x$
$- 2.7x + 5.8y = 11.6$

_____

7 Graph the system by hand, using either the intercept method or the slope-intercept method. Identify the system as dependent, inconsistent, or consistent and independent.

$w - 2z = - 1$
$2w + z = 8$

_____
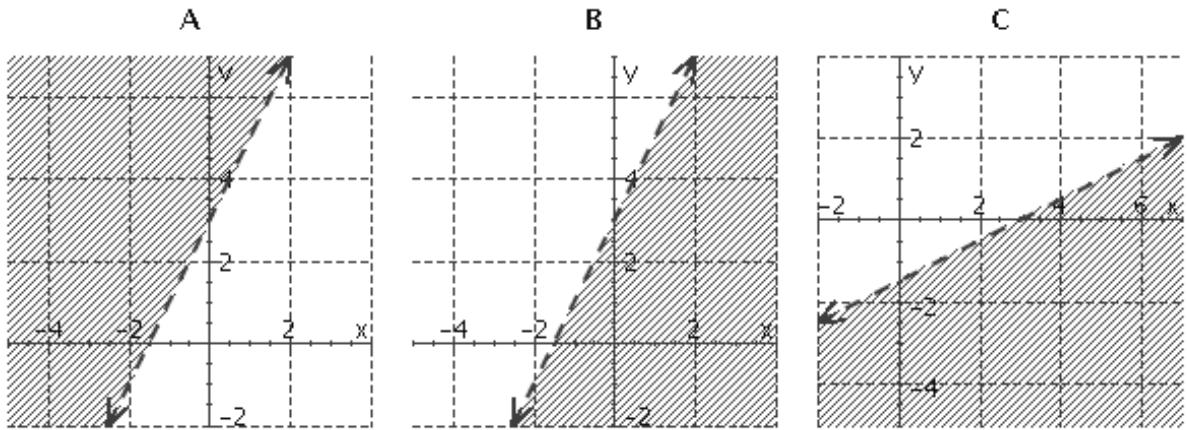
8 Use linear combinations to identify the system.

$$\begin{cases} 4x - 7y = 2 \\ - \dfrac{7y}{2} = - 2x + 1 \end{cases}$$
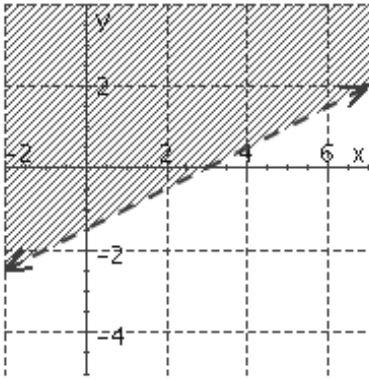
    a. Independent   b. Dependent

9 Yasuo can afford to produce 51x bushels of wheat if he can sell them at x cents per bushel, and the market will buy 2730 - 19x bushels at x cents per bushel. What is the supply equation?

_____

10 Choose the correct graph for the following inequality

$$y > 2x + 3$$

A	B	C

D

11 Find the coordinates of the vertices of the solution of the following system

$$5y - 4x \leq 20$$
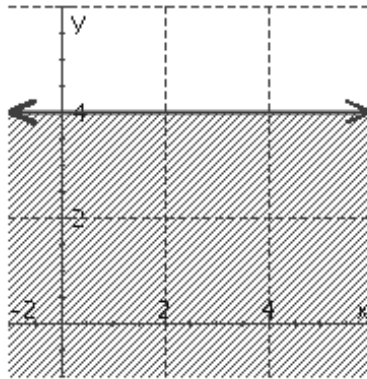$$x + y \leq 13$$
$$x \geq 0, \quad y \geq 0$$

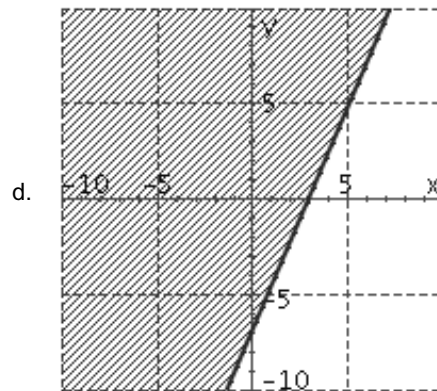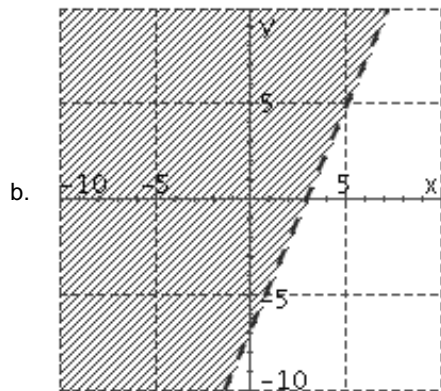**12** Choose the correct graph for the following inequality

$$x \leq 4$$
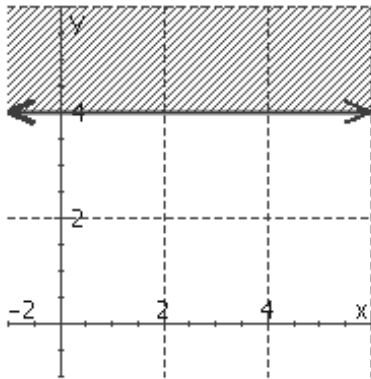
A	B	C
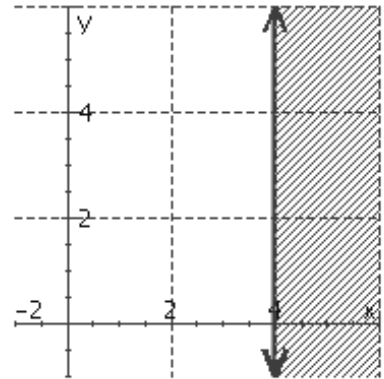
D
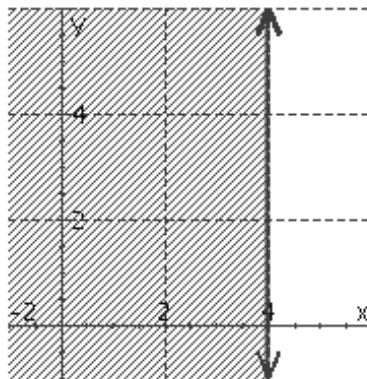
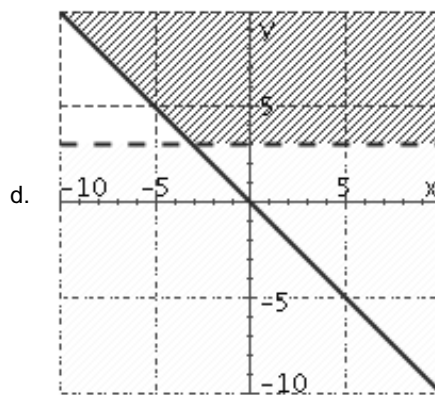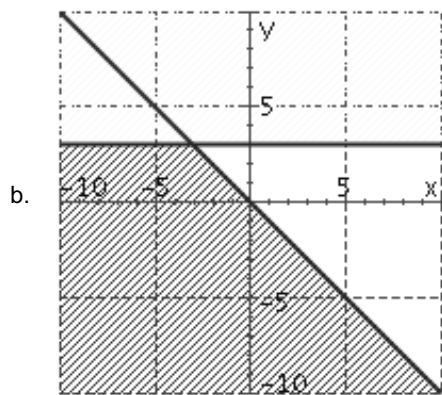**13** Graph the inequality.

$$7x - 3y \leq 21$$

a.

c.

b.

d.
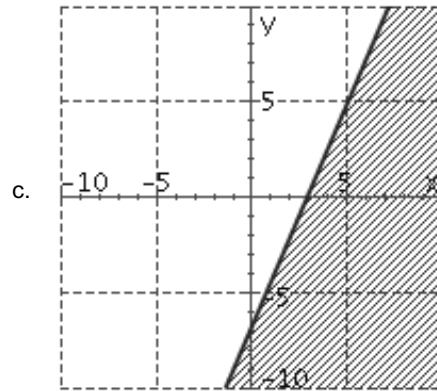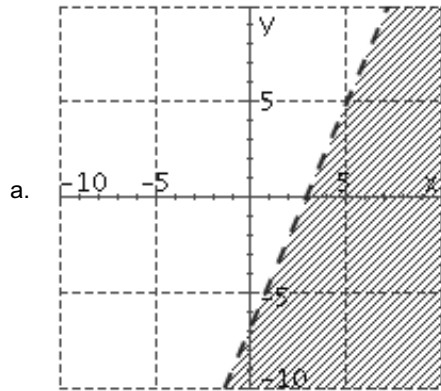
14 Graph the system of inequalities.

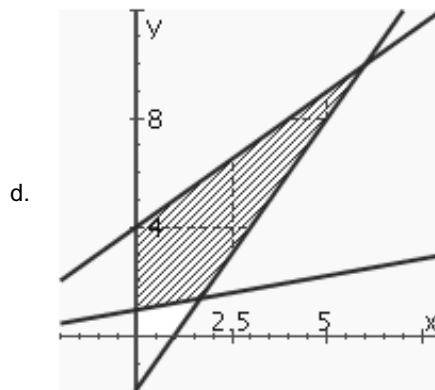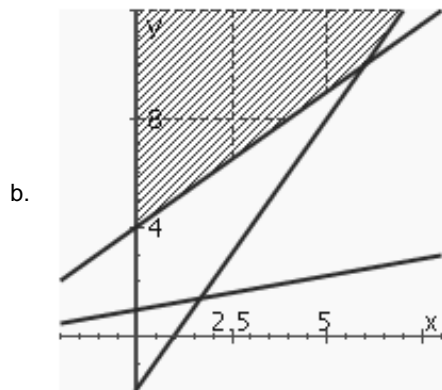$$y \geq - 1x$$
$$y < 3$$

a.

c.

..to be continued
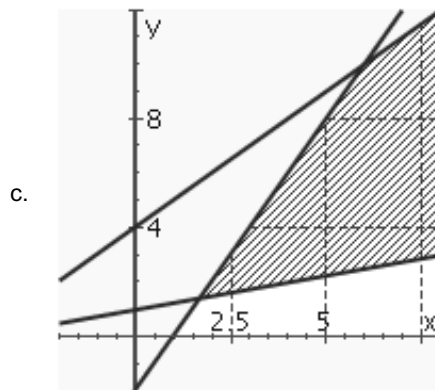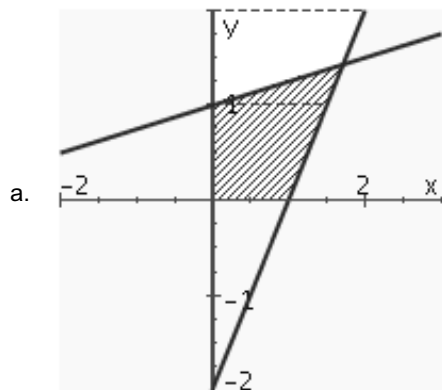
b.

d.
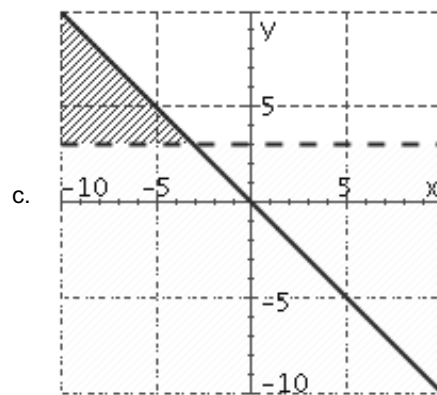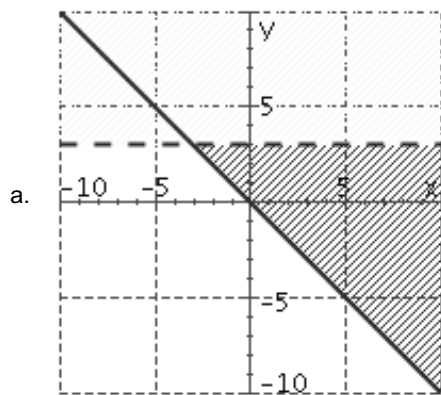
15 Graph the system of inequalities.

$$4y - x \geq 4$$
$$y - 2x \geq -2$$
$$y - 4 \leq x$$
$$x \geq 0 , y \geq 0$$

a.

c.

b.

d.

Recovered Assignment Template 8-21-08 1-04-28 PM PDT

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1. $(60,35)$

2. 480*x,340*y,x+y,480*x+ 340*y

3. $\frac{40}{3}$,120

4. dependent

5. 9,3600

6. $(0,2)$

7. consistent

8. b

9. y=51x

10. A

11. $(0,0)$,$(0,4)$,$(5,8)$,$(13,0)$

12. D

13. d

14. a

15. d