

1. Solve by substitution.  
Check your answer.

$$3x + 10y = 9$$

$$x = 6y - 11$$

3. Graph each system of linear inequalities.

a)  $x - 3y > -6$   
 $x \leq 2$

b)  $-1 \leq y < 4$   
 $y > -\frac{3}{2}x$

c)  $2x + 4y \leq 4$   
 $3x - 2y > 4$

2. Imelda purchased 5 pair of shoes and 3 purses for \$1467. Later, she purchased 7 purses and 3 pair of shoes for \$1551.

a) Write a system of equations to find the cost of a pair of shoes and the cost of a purse.

b) Solve your system of equations and state the cost of a pair of shoes and the cost of a purse.

4. Solve by elimination.

$$6x - 8y = 14$$

$$-15x + 20y = -35$$

5. What does the graph of the system in #4 above look like? Classify the system as inconsistent, dependent, or independent.