1) Solve the system by using any method and explain why you chose this method.

$$-2x + 2y = 6$$
$$4x + 2y = -5$$

2) Without graphing, determine whether the following system has one solution, infinitely many solutions or no solution.

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

3) Solve the system by using any method and explain why you chose this method.

$$\begin{aligned} x - y &= 4\\ y &= 3x - 2 \end{aligned}$$

4) Without graphing determine if the following system has one solution, infinitely many solutions or no solutions.

$$y = 4x + 2$$
$$y - 2 = 4x$$

5) Solve the system by using any method and explain why you chose this method.

$$y = 2x + 1$$
$$y = -2x - 3$$

6) Graph the system of linear inequalities. SHADE YOUR SOLUTION REGIONS NEATLY.



7)

Refer to the graph below. Which of the following points are solutions?



		Yes	No	Explain
A	(0, 0)			
В	(-2, 6)			
С	(-4, 1)			
D	(0, 3)			

8) The math club and the science club had fundraisers to buy supplies for a hospice. The math club spent \$135 buying six cases of juice and one case of bottled water. The science club spent \$110 buying four cases of juice and two cases of bottled water. How much did a case of juice cost? How much did a case of bottled water cost?

9) Ali wants to rent a car for a day so he can visit his sister at college. He has called two car-rental agencies. Rent-a-Heap charges a rental/insurance fee \$50 plus \$0.12 per mile driven. Kurt's Rent-a-Car charges a rental/insurance fee of \$40, plus \$0.20 per mile driven. When is the distance and cost the same for both companies?

10) Graph the system of linear inequalities. SHADE YOUR SOLUTION REGIONS NEATLY.

y > 3x - 2 $y \le 2$

11) Graph the system of linear inequalities. SHADE YOUR SOLUTION REGIONS NEATLY.

$$x \le 6$$
$$y < \frac{3}{2}x - 4$$