Beginning Algebra	Name:
Study Guide 6	Class:
Due Date:	Score:

No Work \Leftrightarrow No Points

Use Pencil Only \Leftrightarrow Be Neat & Organized

1. (3 points) Solve $3x - 1 \le -4$, then express your final answer both graphically as well as <u>set-builder</u> notation.



2. (3 points) Solve $-2x + 7 \ge 5$, then express your final answer both graphically as well as <u>set-builder</u> notation.



3. (3 points) Solve 2(x-1) > x-1, then express your final answer both graphically as well as <u>set-builder</u> notation.



4. (4 points) Solve -2(x-3) + 4 < -(x-10), then express your final answer both graphically as well as <u>interval</u> notation.



5. (4 points) Solve $-10 \le 4x - 6 < 2$, then express your final answer both graphically as well as interval notation.



6. (4 points) Solve $-1 \le 5-3x < 2$, then express your final answer both graphically as well as interval notation.



- 7. (3 points) Solve $2x + 3y \le -12$ for the y variable.
- 7. __ 8. (3 points) Solve $4x - 3y \ge 9$ for the y variable. 8. _____ 9. (3 points) Solve $\frac{1}{2}x - \frac{2}{3}y \ge 1$ for the y variable. 9. _____ 10. Translate the following into a mathematical notation: (a) (1 point) x is greater than -5. (a) _____ (b) (1 point) x is less than 3. (b) _____ (c) (1 point) x is at most 10. (c) _____ (d) (1 point) x is at least 0. (d) _____ (e) (1 point) x exceeds -5. (e) _____ (f) (1 point) x is any value from -2 to 3. (f) _____ (g) (1 point) x is between -4 and 4, inclusive. (g) _____ (h) (1 point) x is between -2 and 5, exclusive. (h) _____

- 11. The manager of an art supply store discovers that they can sell N sketch pads per month at the price of P dollars each according to the formula N = 1800 250P. What price should they charge if they want to sell
 - (a) (3 points) at least 800 sketch pads each month?

(a) ______
(b) (3 points) at most 1050 sketch pads each month?
(c) (3 points) from 800 to 1300 sketch pads each month?

(c) _____

12. (3 points) Find the corresponding temperature range in degree Celsius by using the formula $F = \frac{9}{5}C + 32$ if the temperature in degrees Fahrenheit is between 95° and 113° , inclusive.