Chapter 7(4, 8) Circle Groups Problems

Do all work on the answer sheet provided.

[1] Graph. (State m and b and show thought process and test point.)

$$3x + y > 2$$

[2] Solve, graph and check. (One yes and two no of the same number.)

$$\tfrac{1}{4}x + 9 > 11 \quad \text{or} \quad -29 > x + 2$$

[3] Solve, graph and check. (One yes and one no)

$$-47 \leq 1 + 8x < 25$$

[4] Graph. (State m and b and show thought process and test point.)

$$y \geq \tfrac{2}{3}x - 4$$

[5] Solve, graph and check. (One yes and two no of the same number.)

$$1 - 2x > 33 \quad \text{or} \quad 2x + 5 \geq x + 9$$

[6] Solve, graph and check. (One yes and one no)

$$41 \leq 6x - 25 < 113$$

[7] Answer the following questions

a) If the number is included in the answer, which kind of circle should be used?

b) "At least" is which inequality symbol?

c) If the test point yields a true statement, how do you shade?

d) A dotted line is used with which inequality symbol?

e) Translate: "A number is between three and fifteen"

f) Which compound inequality's solution is the overlapped area?

[8] Graph. (State m and b and show thought process and test point.)

$$4x - 3y < -6$$

[9] Solve, graph and check. (One yes and one no)

$$5 < 11 - \tfrac{1}{8}x \leq 13$$