Cumulative 3-4 Review

Name_____

1) Solve each equation. $\nabla = \frac{W}{W}$

a)
$$7 - \frac{w}{2} = 9$$

b) 2x - 4 = 2(x - 2)

c)
$$3x + 7 = 5x - 13$$

d) $\frac{1}{2} = \frac{x - 3}{x + 1}$

e) 7.4 + (-5.1x) + 3.2x = 20.8

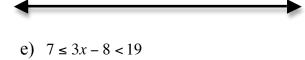
f) |4x-2| = 12

- 2) Solve each inequality and graph.
- a) $2(x-4) \ge 6$

b)
$$-\frac{m}{3} + 2 \le 9$$

c)
$$2x + 10 \ge 7x + 7$$

d) 2x - 10 > 3(-x + 5)



f) -8x > 24 or 2x - 5 > 17



h) |x-4| > 2

3) A rectangular pool is twice as long as it is wide. What are the dimensions of the pool if the perimeter is 42 yards?

4) A shopper's discount club charges a monthly fee of \$15 and sells gasoline for \$2.05 per gallon. The gas station across the street sells gasoline for \$2.35 per gallon and charges no fee. How many gallons of gasoline would you have to buy in one month to spend the same amount at either store?

5) A DVD club charges a monthly membership fee of \$4.95 and \$11.95 for each DVD purchased. If a Aaron's bill for the month was \$64.70, how many DVDs did Aaron purchase?

6) If it costs Mike \$11.79 in gasoline to drive 90 miles, how much will it cost him to drive 150 miles?

7) The sophomore class is putting on a variety show to raise money. It costs \$700 to rent the banquet hall they are going to use. If they charge \$15 for each ticket, how many tickets do they need to sell in order to raise at least \$1000?

8) Write an inequality for each situation.

- a) A car dealership sells at least 35 cars each week.
- b) No more than 425 tickets to a musical will be sold.

9) Write a compound inequality for each situation. a) A car salesman has been told to sell a particular car for more than \$14,500 and up to the sticker price of \$15,755.

b) The width of a parking space needs to be at least 8 feet and no more than 11 feet.