7.1: 1. La costa charges \$5.00 per burrito and tacos for \$2.00. La costa has an earnings goal of \$20 for the day.



- a. Write a linear equation that describes the problem.
- b. Graph the linear equation.
- c. If lacosta sells 4 tacos, how many burritos will need to be sold?

2. KHS charges \$4.50 for the dance ticket and \$1.50 for each grape soda. Kimball hopes to earn \$9.



- a. Write a linear equation that describes the problem.
- b. Graph the linear equation.
- c. If one lonely person shows up to the dance how much soda does he need to buy so Kimball earns \$9.

<u>7.2:</u> Use the following for 1–3: Plumber Fred charges \$20 for a house call plus \$40 per hour. Plumber Gianni charges \$80 for a house call plus \$20 per hour.

1. Write a one-variable equation for the charges of Fred and Gianni

Fred=*f*(*x*) = _____

Gianni= *g*(*x*) = _____

2. After how many hours will the two locksmiths charge the same amount?



3. Plot f(x) and g(x) on the graph below. Find the intersection.

4. Katelyn has \$1200 in savings. She has a recurring monthly bill of \$60 but no income.

- a. Write an equation, f(x), representing her savings each month.
- b. Let g(x) = 0 represent the point when Katelyn has no money left. In how many months, x, will her savings account reach zero?

<u>7.3 :</u>

Use substitution to tell whether each ordered pair is a solution of the given inequality.

1. (1, -3); 3x-2y > 22. (9, 12); $2y \le 2x + 6$ 3. (0,0); y < -2

Rewrite each linear inequality in slope-intercept form. Then graph the solutions in the coordinate plane.



- 6. Aimal wants to be a rapper. Aimal is buying gold chains for 1,000 and Diamond rings 2,500 . He will spend **at least** 10,000 dollars.
 - a. Write an inequality to describe the situation.
 - b. Graph the solutions.
 - c. Give two possible combinations of chains and rings he can buy.





