Name: _____ Date: _____ Period: _____

Writing Linear Equations from Contexts

1. A local pizza joint charges $5.00 for a large pizza and an extra $.50 per topping. Write an equation that models price, p, and the number of toppings, t.

2. The waterpark's main pool holds 10,000 gallons of water. On a hot summer day, the water evaporation rate is 15½ gallons per hour. Write an equation that models the amount of water, w, and the time per hour, t. Additionally, how much water is left in the pool at the end of the 12-hour day?

3. Gas prices in Bourbonnais are approximately $2.75 per gallon. Write an equation that models the cost, c, and gallons, g.

4. Operating costs at a local business are $360 per day. On average, the business makes $12 per customer. Write an equation that models the business profit, p, and the amount of customers, c. How many customers would have to visit the store in order to make $240 one day?

5. Julie rents a boat on a lake. The boat rental company charges her a flat-out rate of $100. It will also charge her $20 for each hour she uses it. One student writes the equation $y = 100x + 20$ to model the cost Julie will get charged. Is this equation correct? Explain.

6. Create your own context and equation to go along with it!