Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Marginal Analysis PIZZA!!!!! (Yummie or Bummer?)**

**Introduction:** Most people love pizza! But what are the cost of eating pizza? This lesson examine the following ideas:

**Marginal Analysis:** Analysis that involves comparing the marginal benefits and marginal costs. Requires decision makers to evaluate whether the benefit of one more unit of something is greater than its costs. “Marginal” in this case means “additional.”

**Marginal Benefit:** The additional benefit to a consumer from consuming one more unit of good or service. A person’s marginal benefit is also the maximum he/she is willing to pay to consume that additional good or service.

**Marginal Cost:** The extra cost of producing or consuming  one additional unit.

**Think about this scenario:**

You arrive at the pizza place hardly able to think because you’re already salivating at the idea of biting into a slice. Tomatoes, honey ham, onions, mozzarella and cheddar cheese, garlic olive oil, fresh herbs… the hunger consumes you. The box arrives and before you know it half is gone. But you valiantly eat onwards. The excitement has hardly faded. Only two more slices now, but you’re no quitter! Done. You sit back and feel the sweat trickle down your forehead as you observe the empty box – the ruins of your conquest. Again it seems, you can hardly think, only now it’s not hunger, but the bittersweet regret of a food coma painfully settling in.

**Marginal Thinking:** When do you stop eating the pizza?  In this scenario, what was the marginal benefit? What was the marginal cost?

**Directions:** As you read the following description of marginal thinking, underline the key concepts, decisions, and definitions.

You can find it plastered across business papers and economics textbooks and peppered into political speeches, joined with fancy suffixes like –ly and -ized, and coupled with words such as utility and profit. With its many forms it can seem like a chameleon of a word, but the idea of a margin is one of the bedrocks of economics and actually, quite important for many things in life.

In economics, the use of *marginal* or *on the margin* has to do with how things, circumstances, and results will change given a slight shift in total quantity or magnitude. It can be thought of as comparing the costs and benefits of the next step forward. It emphasizes analyzing the NEXT unit of action or consumption at every point in a process rather than a one time assessment of the ENTIRE amount.

**Thinking on the Margin**

Coming back to our first world problem, you should think on the margin when you decide whether or not to bite into that next cheesy slice of deep dish pizza. This means asking and answering the question: What are the *marginal benefits* and *marginal costs* if I expend an extra unit of my resources (time, money, attention, effort) on this next slice; and which are greater?

We are not asking what the benefits and costs of eating the WHOLE pizza are. We take the experience one slice at a time- asking the above question before eating each next slice (\*note- being pedantic, thinking on the margin, one should actually ask this question after each small bite, but we will let this go in order to illustrate the larger concept).

*Marginal benefit* is the benefit you receive from the next unit of consumption/action. This can include joy, compensation, future advantages, etc. –all the positive consequences of the action.

In the pizza case:

1. The happiness you get from the taste of the additional slice
2. The calories for sustenance that the next piece of pizza provides
3. Making your friends marginally more impressed by how much you can eat

*Marginal cost* is the cost to you for the next unit of consumption/action. This encompasses monetary price, physical pain, time, effort and more- all the negative consequences of the action.

In the pizza case:

1. Stomach pain coming from consuming an extra piece
2. Excess calorie intake from the added slice that you may later regret
3. Friends being marginally more disgusted by how much you eat

Every additional piece makes you more full and less excited to continue eating. The marginal costs increase and marginal benefits decrease. The ideal method of consumption is to continue eating more pizza, assessing the costs and benefits of each NEXT slice until the pain of the next bite exceeds the gain. When the marginal costs exceed the marginal benefits, you have reached a point at which another slice of pizza will not improve your happiness. At this time you can be sure that stomach pain is right around the corner. This almost always yields a more effective and satisfying result than an assessment of how much TOTAL pizza to eat before even beginning- the beauty of marginal thinking.

**The Marginal Takeaway:** Whenever you make decisions, from whether to stay in school for another year to how much orange juice you should drink with breakfast, ask yourself what the marginal costs and marginal benefits are for the next unit of consumption. Once you clearly identify what you are giving up and what you are receiving from that next unit of use, you are more likely to make a wise choice. Whenever the marginal benefits exceed the marginal costs, you carry forward with whatever you were contemplating. When the reverse is true, you do not and shift to something with a better marginal return per your effort.

This manner of thinking will enable you to get the most out of your actions. Make the choice, and *Read Between the Margins.*

**Reflection Question:** When have you practiced marginal thinking?  In the space below, write a short story about a time when you had to make a choice about marginal benefits and marginal cost.  When did you decide that consuming more (one more unit) would lead to less marginal benefit and more marginal costs?