

# SMARTUTOR

## **Suddenly everything has changed.**

Summer term is right around the corner. I believe I have preferences from each and every one of you. As soon as I receive budget forecasts, I can turn around the schedule in a few days.

## **BRUSHING UP**

Today is an odd application of elasticity. I wanted to share with you as I have seen it in more and more sessions lately.



## **You Seem So Out of Context**

Make sure you have a clear understanding of the learners problem before turning them away or to a different subject. A student saying "Taxes" may be referring to filing a personal tax return (out of scope) or a misinterpretation of a direction. They may be "Find the total taxes raised by a \$1 per unit tax" which is certainly in scope. The examples and possibilities here are endless.

## **And I have to Speculate**

You can confirm answers if you feel confident you have all relevant information. Please see the attached Pedagogy document for more details

## **Slightly Bored and Severely Confused**

As tutors our goal is to engage learners. Most often students who share short messages are nervous, not rude. Do your best to get their confidence and ideas flowing.

## **Just say how to make it right**

Do your best to share some usable content in your first two or three messages if at all possible. I've noticed it really helps my sessions fly!

## **Oh how you laughed**

### **At my complete lack of grace.**

There are so many moving parts to our work that I can't pretend to know them all. Rebecca used to say :I don't know what I don't know." Tell me things that happen in your sessions, world, schedule, or anything else.

## **Feed me lines about some idealistic Future**

We are going to be hiring new domestic tutors in the near future. I will share the job req when it comes out. Consider inviting a colleague to apply!

## **I'm not coming out until this is all over**

Limit personal comments on current affairs (Ukraine, inflation, etc) outside of an academic context. You can certainly talk about the impacts within a course framework.

## **I might be biased, but I spelled your name right**

Students LOVE pre scheduled offerings. They build relationships working with their favorite tutor (YOU!), at a time that works for both of you. Consider sprinkling in PS here and there.

## **STUDENT APPRECIATION COMMENT**

*[tutor] was super patient and was amazing overall!  
I give [Tutor] a 5-star rating!*

## *The yellow submarine (Tech support corner)*

Pressing f5 to refresh the board seems to fix a number of common issues that may crop up. A word of caution though, it really confuses our screenshare applet.

## Elasticity & Markup.

**The setup:** We're all very skilled, and we all know our stuff. I get it. However, we are here to serve the needs of our clients. Sometimes, that means learning new tricks to go alongside existing content knowledge. One concept that has been finding its way into our sessions is Markup.

Traditionally this is an accounting concept. However, this version of markup focuses on Elasticity. Specifically, it says that

$$\text{Markup Percentage} = 1/(-e-1)$$

and

$$\text{Price} = (1 + \text{Markup Percentage}) * \text{Marginal cost.}$$

### Example 1

If product had a Elasticity of demand of -4, and had a marginal cost of \$8, Compute price:

$$\text{Markup \%} = 1 / (-4-1) = \frac{1}{5} = 33.33\%$$

$$\text{Price} = (1 + 33.33\%) * 8 = \$10.67.$$

This can be treated like algebra and worked forward and backwards as needed.

### Example 2

A product regularly sells for \$10. It was moved from it's in-aisle location to an endcap. This changed it's price elasticity of demand from -2 to -3. What price should this item sell for on the endcap?

**The work:** We essentially work this twice.

Starting with the \$10, E=-2 situation.

$$\text{Markup percentage} = 1 / (-e-1)$$

$$\text{Markup percentage} = 1 / (-2-1) = 1/1 = 100\%$$

$$\text{Price} = 1 + \text{Markup percentage} * \text{Marginal cost}$$

$$\$10 = (1 + 100\%) * \text{Marginal cost}$$

$$\$10 = 2 * \text{Marginal cost}$$

$$\$5 = \text{marginal cost.}$$

Using that MC=\$5 data, we can move onto the end cap situation

$$\text{Markup percentage} = 1/(-e-1)$$

$$\text{Markup percentage} = 1/(3-1) = \frac{1}{2} = 50\%$$

$$\text{Price} = (1 + \text{Markup percentage}) * \text{Marginal Cost}$$

$$\text{Price} = (1 + 50\%) * \$5$$

$$\text{Price} = \$7.50$$

### What this means for you, the tutor:

There are many ways and equivalencies in this formula and I'm not going to speculate. The goal is to get the learner to share a formula and be patient with them