Do you think you know elasticities? Using your Introductory Microeconomics

Lightning round, then answers, then explanations.

1) (Easy) If an **income** elasticity of **demand** is negative, what does that tell you?
2) (Pretty Easy) In a **cross-price** elasticity of demand is **negative**, what does that tell you?
3) (Sort of Easy) If **price** elasticity of **supply** is negative, what does that tell you?
4) (Medium) If the **price elasticity of demand is 0.2** (really -0.2) and you need to sell 10% more product (because it is going to be worthless soon), how much do you need to cut your price?
5) (Medium) In the previous question, what should you do?
6) (Hard) The slope of your demand curve is -0.5. Your current price is $100 and you are selling 200 units. What will happen to total revenue if you raise your price slightly?
7) (Beast Mode) Suppose you own two rare postage stamps- the **only two** in existence. At the world's largest stamp auction, you run up on stage and eat one of the stamps. What would make you do such a thing?

Elasticity: A few notes

Interpretation:

"For each 1% change in **cause** there will be a **(elasticity)** % change in **effect"**

E= $\frac{\%\Delta \boldsymbol{B}}{\%\Delta \boldsymbol{A}}$ **,** called the *"**A** elasticity of **B**"* The first word on bottom, and is the *cause*

Price Elasticity of Demand= $\frac{\%\Delta \boldsymbol{Q_d}}{\%\Delta \boldsymbol{P}}$

Midpoint Formula: The %ΔX=$\frac{\Delta X}{AvgX} * 100$

"Point Elasticity" of supply or demand: ε=$\frac{1}{slope}\frac{P}{Q}$

"Total Revenue Test" for price elasticity of demand:

Raise price and TR↑, inelastic
Raise price and TR↓, elastic
Lower price and TR↑, elastic
Lower price and TR↓, inelastic
Why? If elastic, quantity changes by a larger % than price