Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) ( 20 points) The table to the right can be used to calculate three different elasticities. However, you will have only learned one or two, so I will only ask about the one. There is a pair of rows which can be used to calculate the own-price elasticity, $\mathrm{E}_{\mathrm{P}}$. The other five pairs of rows cannot be used. Which pair of rows can be used? Explain your logic. Calculate $E_{P}$ using both the point formula and

| $\mathrm{P}_{\mathrm{pb}}$ | $\mathrm{P}_{\mathrm{J}}$ | I | $\mathrm{Q}_{\mathrm{pb}}$ |
| :---: | :---: | :---: | :---: |
| 10 | 10 | 100 | 40 |
| 10 | 10 | 50 | 20 |
| 30 | 20 | 100 | 10 |
| 30 | 10 | 100 | 20 | the arc formula. Show all work. What do those numbers tell you about the product? ( Pb is peanut butter and j is jelly.)

2) (15 points each) For each of the following products, give me an estimate of what you think the value of the elasticity of demand is. Explain how you decided on each number.
A) gasoline
B) Sprite
C) a new house
D) heroin
3) (10 points) What happens to the elasticity of demand for a product over time? Explain your logic.
4) (10 points) Are products which make up a large percentage of your budget elastic or inelastic? Explain your logic.
