

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) (10 points) The article below mentions several examples of economies of scope. Tell me one of them and explain how that fits the definition of economies of scope.

<https://finance.yahoo.com/news/bitcoin-economies-scope-way-forward-204748449.html>

2) (25 points) Draw the LRATC/SRATC/LRMC/SRMC diagram with three SRATC and three SRMC curves. Briefly state how you found any important point.

3) (5 points) Why does only one SRATC cost curve touch the LRATC at their minimum point? In other words, why don't the other SRATC curves touch the LRATC at the minimum point of the SRATC?

4) (20 points) Why is the LRATC curve the envelope of the SRATC curves? Why doesn't that logic apply to the LRMC curve and the SRMC curves? (In other words, how can the SRMC be less than the LRMC at some points, but greater than the LRMC at other points?)

5) (10 points) Suppose that if you make just small cars, it will cost you \$1 million to make 100 small cars. If you make just large cars, it will cost you \$1.2 million to make 100 large cars. However, if you make them together, it would cost you \$2 million to make 100 of each. What is the economies of scope? What does that tell you?

6) (15 points) Explain the difference between the learning curve and increasing returns to scale.

7) (15 points) We assume that perfectly competitive firms profit maximize. What might they do instead? Explain why they might do that.