

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) Draw the supply/demand for face masks. Illustrate the effects of COVID-19. Explain why the curve(s) moved as drawn. What happens to the price of a face mask and the quantity of masks sold?

- 2) (20 points) Go to <https://investingnews.com/lithium-investor-expectations-2025/>. Use the supply/demand diagram for lithium to illustrate the first three predictions of the article. Explain your logic.

- 3) (20 points) Draw the supply/demand for doors. Illustrate the effect of the price of desks increasing. Explain why the curve(s) moved as drawn. What happens to the price of a door and the quantity of doors sold?

- 4) (20 points) Draw the supply/demand diagram for paper. Illustrate the effects of a new ban on logging. Explain why the curve(s) moved as drawn. What happens to the price & quantity of paper sold?

5) (20 points) To the right is a table of the price of a Coke (P), the price of a substitute like Pepsi (P_s), the price of a complement like ice cubes (P_c), income (Inc.), and the quantity demanded (Q). Exactly one pair of rows can be used to calculate the own-price elasticity of demand. Which two rows are they? Explain how you chose them. Use those two rows to calculate the price elasticity using both the point formula and the arc formula. Show all work. Given your two answers, what type(s) of elasticity is it? (The two answers may give the same or different elasticities.) Explain how you determined which type(s) of elasticity you got.

P	P_s	P_c	Inc.	Q
10	8	5	1000	60
10	8	7	1000	15
20	8	5	1000	30
20	7	5	1000	25
20	7	5	2000	40