

## ECO 150, Winter 2022, Exam #1

**Name:**

**Instructions:**

1. This exam consists of thirteen questions and a bonus. The bonus is harder than the other question but keep in mind that points on the bonus count the same as for any other question. You are encouraged to use the models from class when formulating your answers.
2. Some questions are open ended. You will be graded more on the quality of your explanation than your specific answers. On “true/false” questions, for example, answering only “true” or “false” will receive no credit, even if correct.
3. Do not just copy from the course materials. Doing so will receive no credit.
4. This is an open note exam. You may use any printed course materials. You may not use any electronic devices, you do not need a calculator.
5. All questions will be graded out of ten points. To maximize the potential for partial credit, craft clear and concise responses. If you making assumptions, state them clearly. Use graphs as appropriate.

1. What are the trade-offs (*i.e.* who wins and who loses) from increased unionization?

2. What does it mean for an opinion on economic policy to be falsifiable?

3. What conditions (or assumptions in our model) make it more likely that a minimum wage will lead to major declines in employment?

4. Consider one of the causes for lower crime rates discussed in class or in a related reading. Describe how this explanation could have reduced the incentives to commit crime.

5. True or False? Society dislikes inflation because higher prices mean that almost all households can afford fewer goods and services.

6. Why do most economists believe that higher interest rates reduce inflation?

For questions #7-11 consider the following data on the market for cigarettes.

Table 1: Market for Cigarettes

Cartons	Marginal Utility	Marginal Cost
100	\$20	\$0.50
200	\$19	\$0.50
300	\$18	\$1
400	\$17	\$3
500	\$15	\$5
600	\$13	\$7
700	\$10	\$10
800	\$7	\$13
900	\$4	\$20
1000	\$1	\$25

7. Solve for the equilibrium price, quantity, and price elasticity of demand.

8. Suppose that average household income increases by 10%. Using our basic model of supply and demand, show and explain what happens to the equilibrium price and quantity of cigarettes.

9. How well do you think the assumptions of our basic supply and demand model fit this example?

10. Suppose that each 100 cartons of cigarettes reduces the utility of third-parties (people who neither sell nor buy the cigarettes) by \$10. Using the model of supply and demand, show how this externality may reduce efficiency.

11. Propose a policy that could fix the externality from #9.

12. Does the internet meet the criteria for a public good?

13. Suppose that a market (not necessarily the one from #7-11) switches from perfect competition to monopoly. Explain what will happen to the equilibrium price, quantity, consumer surplus, and producer surplus.

Bonus. Go back to the example of cigarettes from #7. Suppose that the supplier is a monopolist. Show how this market power can be used to make additional profits.