

ECON 0100 | Part D

Demo D1

This MiniExam will take 15 minutes with quick break to follow. MiniExams are designed to both test your knowledge and challenge you to apply familiar concepts in new environments. Treat it as if you're trying to show me that you understand the material. Answer clearly and completely.

Academic Conduct Code | Name: TAYLOR **Student ID:** 😊

The following academic conduct code is designed to protect the integrity of your work. Print your name/initials beside the five academic honesty agreements. I pledge to my fellow students, the university, and the instructor, that:

- ☒ I will complete this MiniExam solely using my own work.
- ☒ I will not use any digital resources unless explicitly allowed by the instructor.
- ☒ I will not communicate directly or indirectly with others during the MiniExam.

Question 1 (of 2) | Ginny's Holiday Decorations

Every year the Hogwarts Decorations Committee solicits donations of 2 galleons (units of currency) from the student body in an interest to raise funds to decorate the common areas of the school during the winter holidays. The more funds that are raised, the better the decorations. The common areas are open to all students so everyone is free to enjoy the decorations no matter whether they donated. Each year Ginny has to decide whether to contribute to the fund. The following matrix represents the payoffs associated with the decorations for Ginny and Everyone Else.

		Everyone Else	
		C	D
Ginny	Contribute (C)	18.2, 1820	-1.8, 20
	Don't (D)	20, 1800	0, 0

(1)

Q1.a | Dominant Strategy

Does Ginny have a dominant strategy? If so, which one? (circle one)

No, C, D

Q1.b | Socially Efficient Strategies

What is the pair of strategies that are socially efficient? Circle one.

(C,C), (C,D), (D,C), (D,D)

Q1.c | The Phenomenon

What is the name of the phenomenon that results from these decisions?

Free Rider Problem

Question 2 (of 2) | Hogwarts Holiday Decorations

Knowing the issues around soliciting the holiday decorations every year, the Committee proposed raising every student's tuition by 2 galleons to ensure the decorations were fully funded. Each house had 25 on-campus students with different willingness to pay. This data is presented in the table below.

	Hufflepuff	Gryffindor	Ravenclaw	Slytherin
WTP	16	20	24	20

Remember, each house has 25 on-campus students, with each student's willingness to pay represented in the table above. So for example, Hufflepuff has a total willingness to pay of 16×25 galleons.

Q2.a | Evaluating a Tuition Rise

If the proposal to raise everyone's tuition by 2 galleons to cover the cost of the decorations were voted on by the student body, what percentage of the student body would vote "YES" for the proposal? 100%

Q2.b | Marginal Social Benefit

What is the ~~margin~~^{marginal} social benefit associated with fully funding the decorations? 2000

$$16 \times 25 + 20 \times 25 + 24 \times 25 + 20 \times 25 = 4 \cdot 20 \cdot 25 = 100 \cdot 20 = 2000$$

Q2.c | Marginal Social Cost

What is the marginal social cost associated with fully funding the decorations? 200

Q2.d | Social Efficiency

Is it socially efficient for the decorations to be fully funded? YES

$$MSB > MSC \\ 2000 > 200$$