

### Problem Set 4

On what and how to submit

- For this and all future problem sets, questions are from the “Problems” section of the questions at the end of the chapter.
- Due before Lecture 5 to your Box folder
- Name the file “ps04\_[lastname].[extension]”. For example, my file would be “ps04\_brooks.pdf”.
- You do not need to type your submission. Any **legible** submission is ok. For example, you can write the problem set with hand-drawn graphs, take a picture, and submit the picture.

1. GLS Chapter 4, Question 8 (omit (d))

2. GLS Chapter 4, Question 11

3. GLS Chapter 4, Question 19 \*\*But only part (a), and with changes as below.

Let  $P_{\text{lures}} = 3$ ,  $P_{\text{guitars}} = 1$ , and income be \$60. Let  $U(L, G) = L^{1/3}G^{2/3}$ . Then  $MU_L = \frac{G^{2/3}}{3L^{2/3}}$ , and  $MU_G = \frac{2L^{1/3}}{3G^{1/3}}$ .

(a) Find the optimal number of lures and guitar picks. How much utility does this deliver?