**IN-CLASS PRACTICE PROBLEMS**

(work in groups of 2-3 people)

1. Tom consumes fishsticks (*F*) and ketchup (*K*). His income is $50 per month and initially the price of fishsticks is $p\_{F}=\$4$, while the price of ketchup is $p\_{K}=\$5$. Assume that Tom views fishsticks and ketchup as imperfect substitutes.

Suppose we observe the following consumption patterns,

|  |  |  |  |
| --- | --- | --- | --- |
| $$p\_{K}$$ | $$p\_{F}$$ | *F* | *K* |
| $5 | $4 | 6 | 5.2 |
| $5 | $3 | 9 | 4.6 |
| $5 | $2 | 13 | 4.8 |

In the space below, derive Tom’s demand curve for fishsticks. In the first graph, plot each optimal consumption bundle using the information provided in the table. In the second graph, plot out his demand curve. I’ve graphed the first set of points for you…

Ketchup

4

6

Fishsticks

0

$$p\_{F}$$

$$I\_{1}$$

5.2

6

10

12.5

Fishsticks

0

2. Sarah allocates her income of $5.00 between the consumption of donuts and coffee. Her tastes and preferences are indicated by the indifference curves shown in the figure below. The price of donuts is $0.50 each. Initially the price of coffee is $1.00 per cup. *Subsequently, the price of coffee falls to $0.50 per cup*.

On the graph below, show the initial utility-maximizing position, the new utility-maximizing position, and separate the income and substitution effects. *You will have to plot the before and after budget lines in order to do this*. For Sarah, **is coffee a normal or inferior good?**

