ECON2300, V. Bardis

Practice Set 1

1 Determine whether the following statement is True, False or Uncertain:
If the price ratio, p_1/p_2, increases, then it must be true that the consumer can afford fewer consumption bundles than before.

2 On the same graph draw the following budget lines
(i) $3x_1 + 2x_2 = 6$
(ii) $6x_1 + 4x_2 = 6$
(iii) $9x_1 + 6x_2 = 18$
Which one of the three represents greater scarcity from the consumer's point of view? If the consumer could "choose her circumstances", which one of the three budget lines do you think she would she choose (and why)?

3 On the same graph draw the following budget lines
(i) $4x_1 + x_2 = 12$
(ii) $x_1 + 4x_2 = 12$
Which one of the two represents greater scarcity from the consumer's point of view? If the consumer could "choose her circumstances", which one of the two budget lines do you think she would she choose (and why)?

4 Show using total differentials that the slope of the budget line $p_1x_1 + p_2x_2 = m$ is equal to $-p_1/p_2$. Explain in words what it means to 'take a total differential of the budget line' ?

5 Suppose a consumer with income m and facing prices p_1 and p_2 is told that she will must pay a tax t for every unit of good 2 she buys *if* her consumption of good 2 exceeds $\bar{x}_2$. Draw her budget constraint.

6 Suppose a consumer with income m and facing prices p_1 and p_2 is told that she will will receive a subsidy s for every unit of good 1 she buys *if* her consumption of good 1 exceeds $\bar{x}_1$. Draw her budget constraint.

7 During the month of March, Bob will spend all his money, m, on *food* and *movies at his local movie theater*. The price of food is p_F and one movie ticket sells for p_M.
(a) Give the algebraic expression and draw the graph of Bob's budget constraint *if* the theater's manager gives him 10 free tickets that are *non-transferable*, that is, the tickets can only be used by Bob.
(b) What if the free tickets are transferable, that is, Bob can sell them in exchange for money?