## ECON203 Microeconomic Analysis (Session 2, 2018)

## Tutorial 2

N.B This is economics - diagrams are always your friend $\odot$

1. Consider the following budget and preference representation for an agent:


The agent has an income of 300 , the price of good 1 is 4 and the price of good 2 is 10 .
(a) How much of good 1 does this agent consume?
(b) If the price of good 1 falls to $\$ 2.50$, while income and the price of good 2 stay constant, how much of good 1 will the agent consume?
(c) How much income must be taken away from this agent to isolate the Hicksian income and substitution effects?
(d) The total price effect of the price change is to change consumption from the point [ ] to the point [ ]? (fill in the blanks with the correct answers).
(e) The income effect corresponds to the movement from the point [ ] to the point
[ ] while the substitution effect corresponds to the movement from the point [ ] to the point [ ].
(f) Is good 1 a normal good or an inferior good?
2. In completely legitimate and totally non-stalkerish ways, you have been able to compile the following information about a sequence of choices by an agent named Martin:

|  | $x_{1}$ | $x_{2}$ | $P_{1}$ | $P_{2}$ |
| :--- | :---: | :---: | :---: | :---: |
| Week 1 | 12 | 24 | 2 | 1 |
| Week 2 | 16 | 32 | 1 | 1 |
| Week 3 | 12 | 24 | 1 | 1 |

a) Show Martin's budget constraints for each of the 3 weeks, and indicative indifference curves.
b) What can you deduce about Martin's preferences? Why?
c) Indicate the income and substitution effects of the price change for good 1 . Explain any surprising results.
3. Feng has this utility function over consumption and leisure: $U=C^{3} L$. His friend Ha-eun has this utility function: $U=C L^{3}$. The price of the consumption good is 1 , and the hourly wage for working is 4 . Neither Feng nor Ha-eun have any non-labour income.

Find Feng's and Ha-eun's weekly income.
[Hints: a week has 7 days of 24 hours each; every hour of leisure means 1 hour not worked; given the price of consumption, income and total consumption have the same value.]

