T3

PART1
MC1) C the substitution effect is less than the income effect.

MC2) D substitution effect exactly offsets the income effect.

MC3) C is one of the determinants of the demand for it.

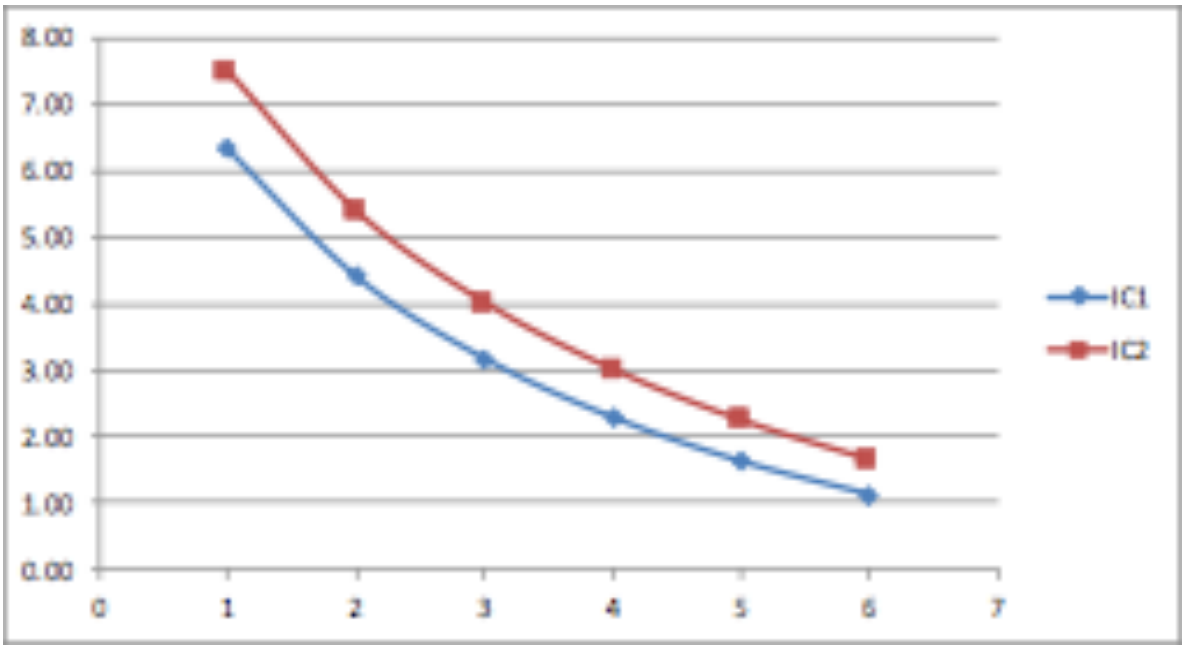
PART2
Q1. How can the budget constraint appear the same even for individuals whose tastes and preferences differ dramatically?
- BC determined by individuals income and prices where preferences are irrelevant as it indicates the feasible set that an individual can afford with their income
- If two individuals have the same amount of disposable income and the same prices for their preferred goods, their BC would be identical

How would different preferences be illustrated in a budget constraint-indifference curve (BC-IC) diagram?
The slope of our indifference curves is given by marginal utility of two goods. Marginal utility is determined by preferences.

Q2.
1.

U = 2*[c1^(0.5) + c2^(0.5)]						
U=		7.0234				7.4641
	IC1				IC2	
c1	c2	Utility		c1	c2	Utility
1	6.31	7.02		1	7.46	7.46
2	4.40	7.02		2	5.37	7.46
3	3.17	7.02		3	4.00	7.46
4	2.29	7.02		4	3.00	7.46
5	1.63	7.02		5	2.24	7.46
6	1.13	7.02		6	1.64	7.46

2./3.



4. Diminishing marginal utility: Successive increments of a good eventually become less desirable.

U = 2*[c1^(0.5) + c2^(0.5)]

U=		7.0234			7.4641			
	IC1			IC2			budget constraint	264.24
c1	c2	Utility	c1	c2	Utility	c1	c2	
1	6.31	7.02	1	7.46	7.46	6.463796	0	
2	4.40	7.02	2	5.37	7.46	0	7.464407	
3	3.17	7.02	3	4.00	7.46			
4	2.29	7.02	4	3.00	7.46			
5	1.63	7.02	5	2.24	7.46			
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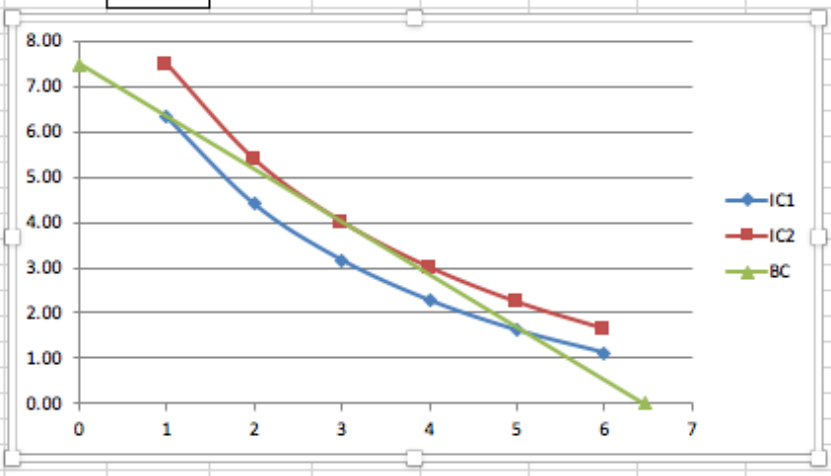


5. Their optimal choice would be 3 units of good c1 and 4 units of c2 from IC2. This is because at this point where the consumer indifference curve and budget constraint intercept, is the combination of good consumers should purchase to maximise total utility

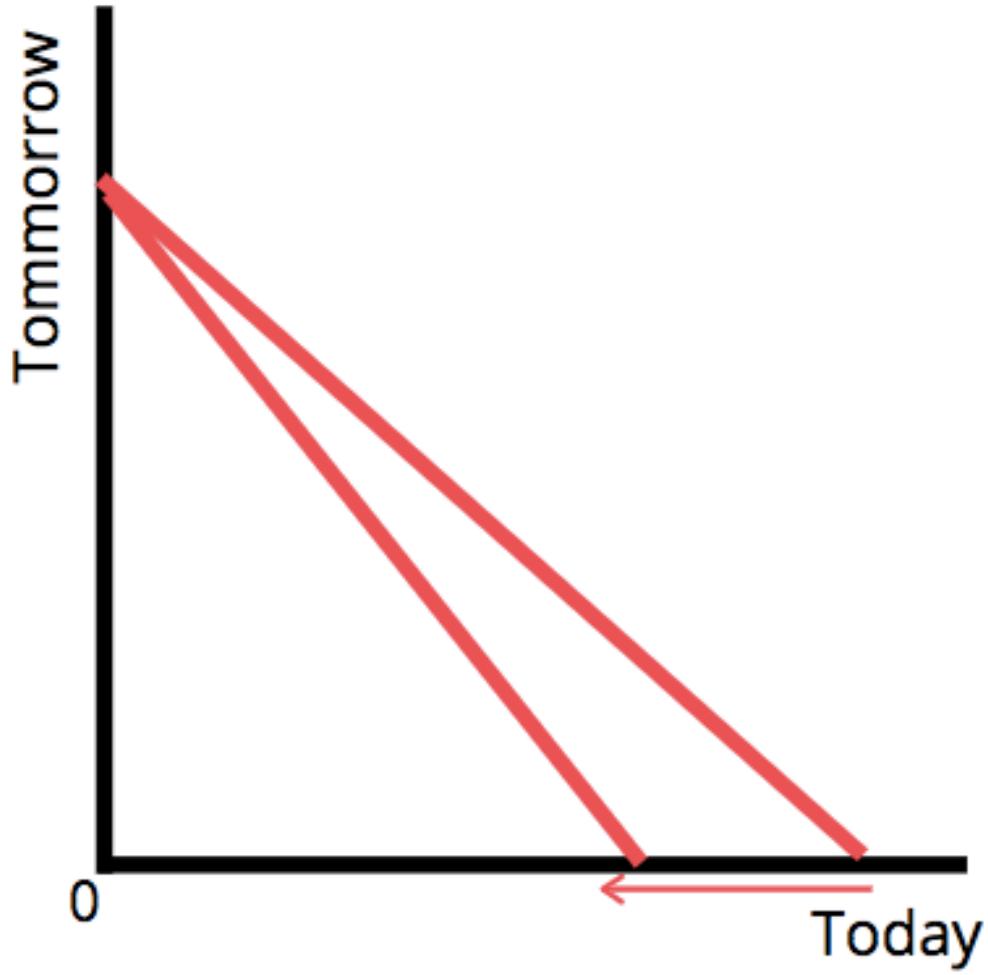
Q3

A)

$U = 2(\sqrt{c1} + \sqrt{c2})$

U = 2√ c1 + 2√ c2
2√ c2 = U - 2√ c1
√ c2 = (U/2) - √ c1
c2= ((U/2) - √ c1)^2

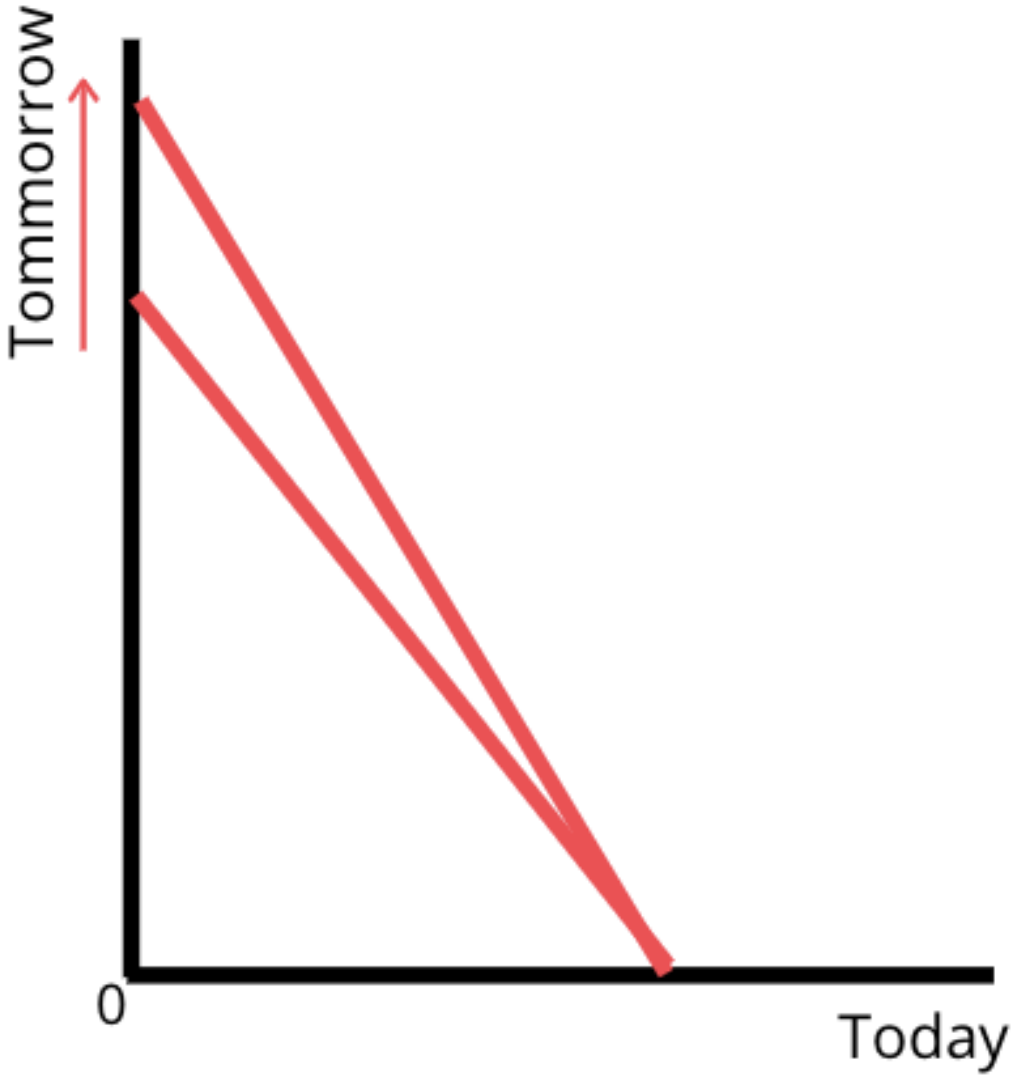
Q4
a) If Sophie is currently a borrower, what does an increase in the interest rate do to her consumption (at today and at tomorrow)?



Today	Tomorrow	
-	+	SE
-	-	IE
-	?	TE

Today consumption decrease
Tomorrow effect is uncertain

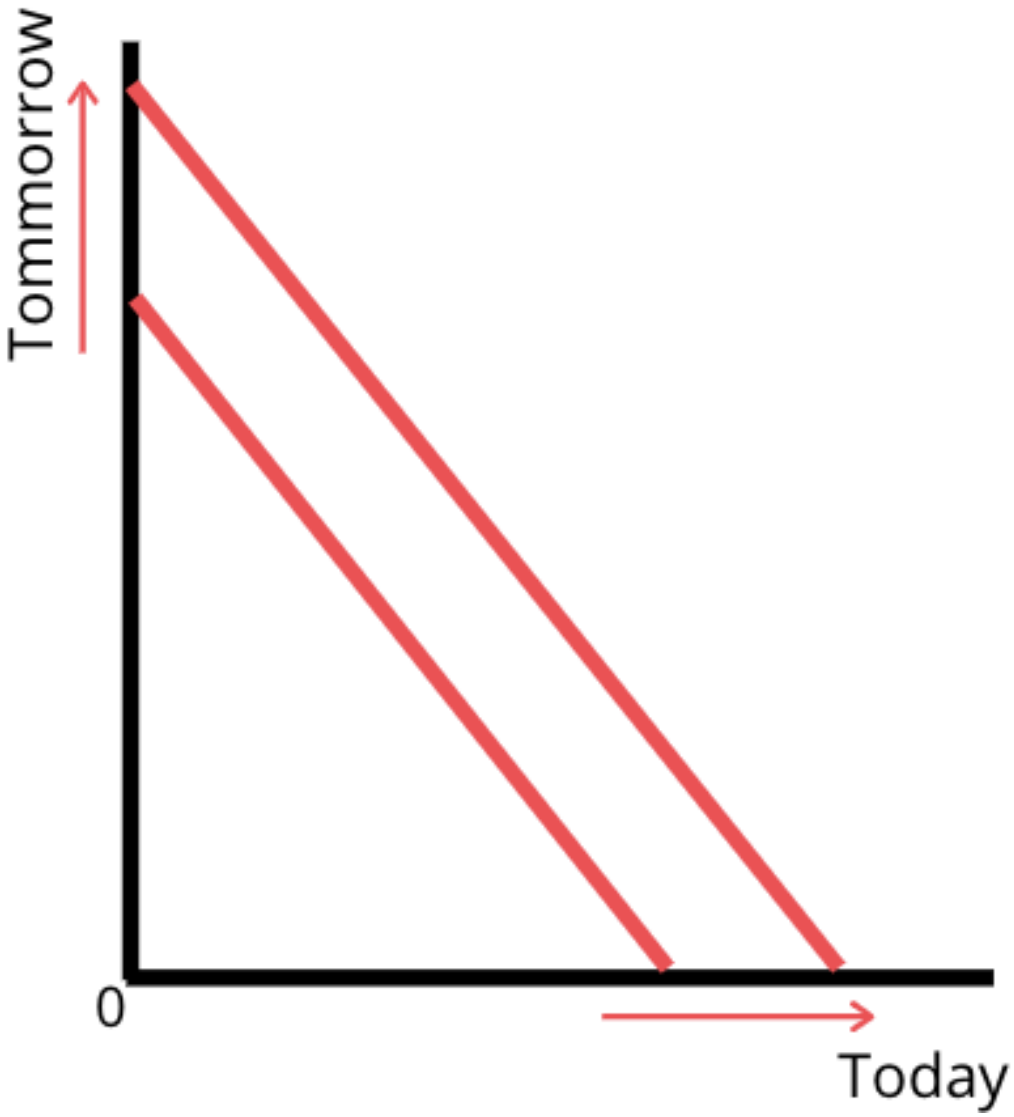
b) If Sophie is currently a lender (i.e. saver), what does an increase in the interest rate do to her consumption (at today and at tomorrow)?



Today	Tomorrow	
-	+	SE
+	+	IE
?	+	TE

Today effect is uncertain
Tomorrow consumption increase

c) If Sophie currently chooses to spend $100 today, what does an increase in her income tomorrow (to $120) do to her saving behaviour (with the interest rate unchanged)?



Today	Tomorrow	
0	0	SE
+	+	IE
+	+	TE

Today consumption increase

Tomorrow consumption increase