6404640200 Nine

1.

Quantity	Total utility from ham (TU_h)	MU	Total utility from cheese (TU_c)	MU
1	15	15	12	12
2	26	11	21	9
3	35	9	27	6
4	41	6	32	5
5	45	4	35	3
6	48	3	37	2
7	49	1	38	1

1. a) $I = 7$, $P_h = 1$, $P_c = 1$

$\frac{MU_h}{P_h} = 6 \quad ; h = 4$

$\frac{MU_c}{P_c} = 6 \quad ; c = 3$

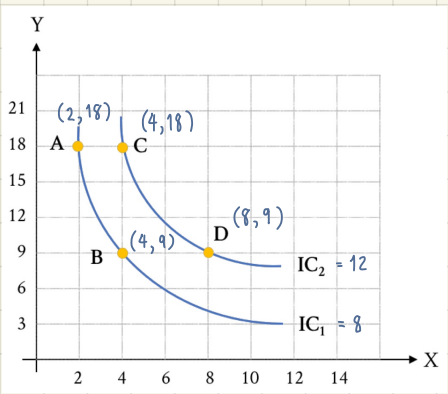
$P_h \cdot h + P_c \cdot c = 1(4) + 1(3)$

$= 7$ ※ no budget remain

4 units of ham and 3 units of cheese to maximized utility.

1. b) To maximized utility, MU must be zero but from the table it does not show where MU = 0 is. Therefore, she is not yet satisfied.

2.



2. a) A (2, 18)
B (4, 9)

$|MRS| = \frac{\Delta Y}{\Delta X} = \frac{18-9}{2-4}$, $\frac{P_x}{P_y} = \frac{P_x}{10}$

$= 4.5$

$MRS = \frac{P_x}{P_y}$

$4.5 = \frac{P_x}{10}$

$P_x = 45$ ※

2. b) $P_x = 180$

$\frac{P_x}{P_y} = \frac{180}{P_y}$

$MRS = \frac{P_x}{P_y}$

$4.5 = \frac{180}{P_y}$

$P_y = 40$

total budget

$P_x \cdot X + P_y \cdot Y = 180(4) + 40(9)$

$= 1,080$ ※

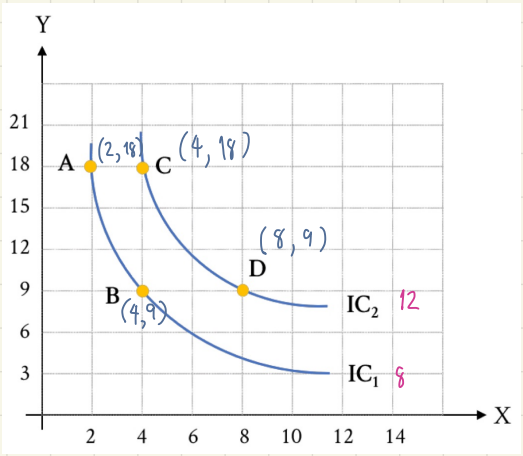
∴ This consumer need to have 1,080 baht to acheive the equilibrium on point B.

2. c) $MRS_{xy} = \left|\frac{\Delta y}{\Delta x}\right| = \frac{MU_x}{MU_y}$

$= \frac{18-9}{4-8}$

$= \frac{9}{4} = \frac{MU_x}{MU_y}$

$\therefore MU_x$ (avocado) is 9 #



2. d) law of deminishing MU (X ↑ → MU ↓)

$MU = \frac{\Delta U}{\Delta X} = \frac{U_2 - U_1}{X_2 - X_1}$

at point A U = 8

x = 2, y = 18

at point C U = 12

x = 4, y = 18

from A to C

$MU = \frac{12-8}{4-2} = \frac{4}{2} = 2$ #

at point B U = 8

x = 4, y = 9

at point D U = 12

x = 8, y = 9

from B to D

$MU = \frac{12-8}{8-4} = \frac{4}{4} = 1$ #

$\therefore$ MU decrease = law of deminishing #