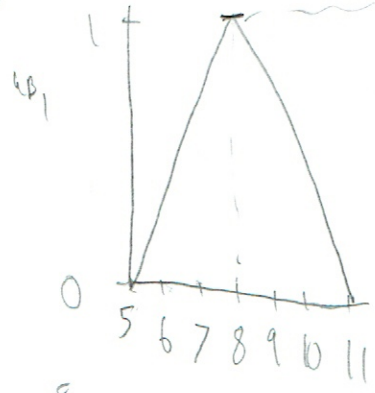
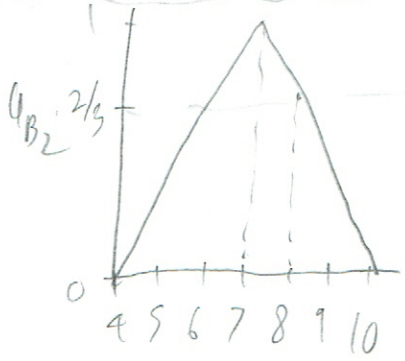
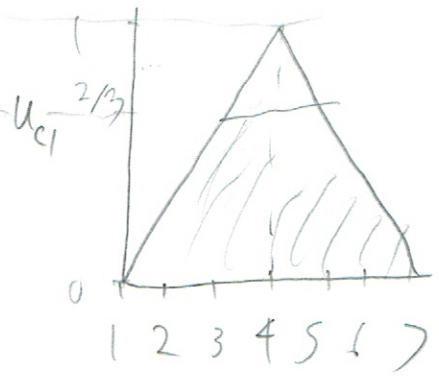
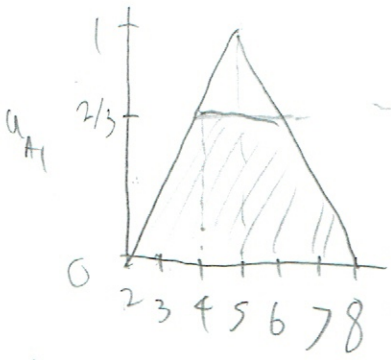
1)

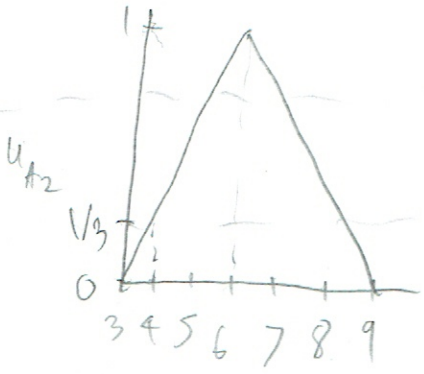


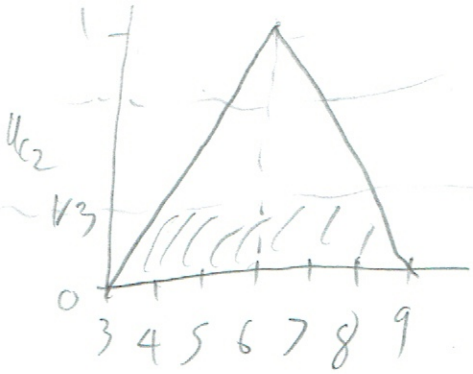




$x_0 \to 8$





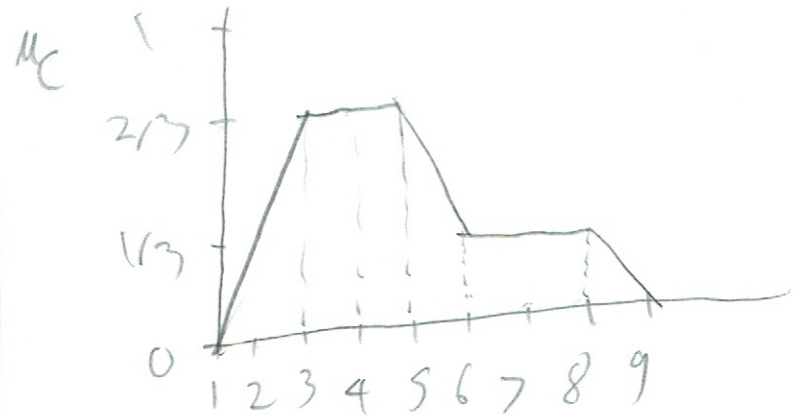


$x_0 \to 4$

~~$x_0 \to 8$~~

(1)

- MOM : 4
- COM : 5



2a)

$\min(\mu_A, \mu_B)$

1.7	0.1	0.2	0.2	0.2	0.1
1.8	0.1	0.4	0.4	0.4	0.1
1.9	0.1	0.4	0.6	0.4	0.1
2.0	0.1	0.4	0.8	0.4	0.1
2.1	0.1	0.4	0.6	0.4	0.1
2.2	0.1	0.4	0.4	0.4	0.1
2.3	0.1	0.2	0.2	0.2	0.1
	0.25	0.27	0.3	0.33	0.35

$1-\mu A$ → extended expansion

1.7	0.8	0.8	0.8	0.8	0.8
1.8	0.6	0.6	0.6	0.6	0.6
1.9	0.4	0.4	0.4	0.4	0.4
2.0	0.2	0.2	0.2	0.2	0.2
2.1	0.4	0.4	0.4	0.4	0.4
2.2	0.6	0.6	0.6	0.6	0.6
2.3	0.8	0.8	0.8	0.8	0.6

A → B

1.7	0.8	0.8	0.8	0.8	0.8
1.8	0.6	0.6	0.6	0.6	0.6
1.9	0.4	0.4	0.6	0.4	0.4
2.0	0.2	0.4	0.8	0.4	0.2
2.1	0.4	0.4	0.6	0.4	0.4
2.2	0.6	0.6	0.6	0.6	0.6
2.3	0.8	0.8	0.8	0.8	0.8
	0.25	0.27	0.3	0.33	0.35

$= R$

b) ~~Apply cylindrical extension of A', ie then take max / min A' o R :~~

~~I will show the first calculation for reference:~~

$A' = \begin{pmatrix} 0 & 0.5 & 0.7 & 0.95 & 0.7 & 0.5 & 0 \end{pmatrix}^T$

×5

$(A', 1, 1) = \text{Max}[\min(0.8, 0), \min(0.6, 0.5), \min(0.4, 0.7), \min(0.2, 0.95), \min(0.4, 0.7), \min(0.6, 0.5), \min(0.8, 0)]$

$= \max[0, 0.5, 0.4, 0.2, 0.4, 0.5, 0]$

$= 0.5$

~~T = 0.5 0.5 0.8~~

$(1,2) = \text{Max}[0, 0.5, 0.4, 0.4, 0.4, 0.5, 0] = 0.5$

$(1,3) = \text{Max}[0, 0.5, 0.6, 0.8, 0.6, 0.5, 0] = 0.8$

$(1,4) = \text{Max}[0, 0.5, 0.4, 0.4, 0.4, 0.5, 0] = 0.5$

$(1,5) = \text{Max}[0, 0.5, 0.4, 0.2, 0.4, 0.5, 0] = 0.5$

$$T = \left\{ \frac{0.5}{125} + \frac{0.5}{0.27} + \frac{0.8}{0.3} + \frac{0.5}{0.33} + \frac{0.5}{0.35} \right\}$$

2bii) $(1,1) = \text{Max}[0, 0.3, 0.28, 0.19, 0.28, 0.3, 0] = 0.3$

$(1,2) = \text{Max}[0, 0.3, 0.28, 0.38, 0.28, 0.3, 0] = 0.38$

$(1,3) = \text{Max}[0, 0.3, 0.42, 0.76, 0.42, 0.3, 0] = 0.76$

$(1,4) = \text{Max}[0, 0.3, \overset{0.28}{0.42}, 0.38, 0.28, 0.3, 0] = \text{~~0.42~~ } 0.38$

$(1,5) = \text{Max}[0, 0.3, \overset{0.28}{0.42}, 0.19, 0.28, 0.3, 0] = \text{~~0.42~~ } 0.3$

$$T = \left\{ \frac{0.3}{0.25} + \frac{0.38}{0.27} + \frac{0.76}{0.3} + \frac{\text{~~0.42~~ } 0.38}{0.33} + \frac{0.3}{0.35} \right\}$$