2.a. F1 100kg/menit E U = ?

J_1 = 15%

F1 A_1 = 85%

U

M P_2 = ?

P1 = ?

P

J_2 = 80%

A_2 = ?

F_2 = ?

J_3 = 15%

A_3 = 85%

F2

P3

J_4 = 60%

A_4 = ?

$F_2 = x . F_1$

$P_2 = P_1 + F_1$

b. $J_1 = 15\% . 100$

$= 15$ kg/menit

$A_1 = 85\% . 100$

$= 85$ kg/menit

$J_2 = J_1 = 15$ kg/menit

$15 = P_1 . 80\%$

$P_1 = 18,75$ kg/menit

$A_2 = P_1 - J_2$

$= 18,75 - 15$

$= 3,75$ kg/menit

$U_{operasi} = A_1 - A_2$

$= 85 - 3,75$

$= 81,25$ kg/menit

c. laju masuk = laju akhir

$P_1 + F_2 = P_2$

$P_2 = 18,75 + 100.x$

jus masuk = jus keluar

$80\% . 18,75 + 15\% . 100x = 60\%(18,75 + 100.x)$

$15 + 15x = 11,25 + 60x$

$45x = 3,75$

$x = 0,0833$

$F_2 = 0,0833 . 100$

$= 8,33$ kg/menit

$P_2 = 13,75 + 8,33$

$= 27,08$

$J_4 = 27,08 \times 60\% = 16,248$

$A_4 = 27,08 \times 40\% = 10,832$

d. laju alir umpan jus buah sebelumnya

$F_1 + F_2 = 100 + 8,33$ kg/menit

$= 108,33$ kg/menit

	F1 (kg/menit)	U (kg/menit)	P1 (kg/menit)	F2 (kg/menit)	P2 (kg/menit)
b) U	100	81,25	18,75	8,33	27,08
Jus	15	0	15	1,2495	16,248
Air	85	81,25	3,75	7,0805	10,832