

BS_HW2

1.

(a) 0.3

(b) 0.3

(c) Yes, there are independent events.

Let $P(A)$: the possibility that NYCU admits her

$P(B)$: the possibility that NTHU admits her

$$P(A|B) = \frac{P(A \cup B)}{P(B)} = \frac{0.2}{0.5} = 0.4 = P(A)$$

2.

(a) $P(B) = 0.4$

(b) $P(B|A_2) = \frac{1}{3}$

(c) $P(B'|A_1) = 0.75$

3.

(a) 1

(b) $1 * 1 * 0.25 = 0.25$

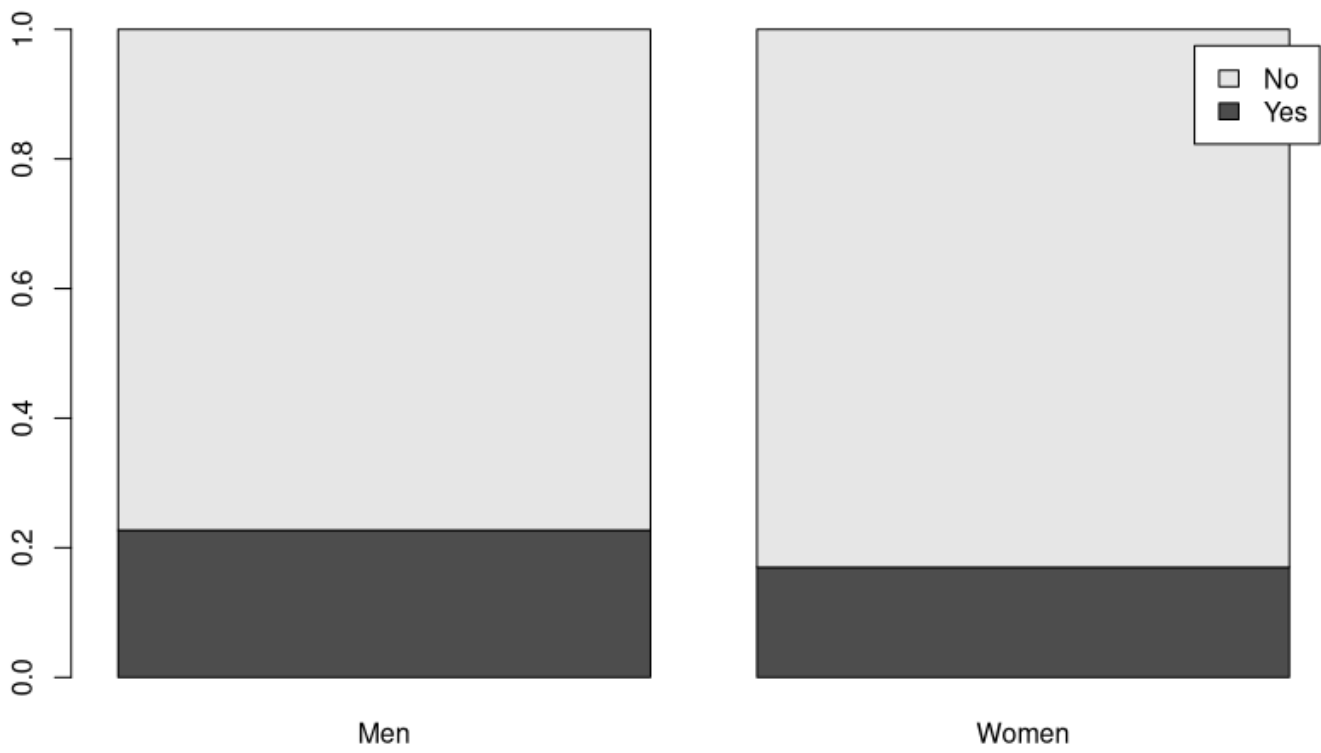
(c) 0

4.

(a)

		Gender	
Frequent_Binge_Drinker		Men	Women
Yes	1630	1684	
No	5550	8232	

(b)



(c) there are slightly little women getting drunk often than men