Homework 0

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- You will need to submit your solutions in PDF to UVA-Collab.

1.

x	P(x is rolled)	P(x is rolled with unfair die)
2	$\frac{1}{36}$	$\frac{1}{12}$
3	1/18	1/6
4	1/12	1/6
5	1/9	1/6
6	5/36	1/6
7	1/6	1/6
8	5/36	1/12
9	1/9	0
10	1/12	0
11	1/18	0
12	1/36	0

2. The probability it is raining given that our roommate just took his umbrella:
$0.2 \times 0.95 \div 0.3 = 0.633$.
If he hadn't taken his umbrella:
$(0.2 - 0.633 \times 0.3) \div 0.7 = 0.0144$.
3. x=1/3
4.It is O(n) run time and the function returns the sum of a list which contains zero negative value. If it does contain negative value, then it returns -1.