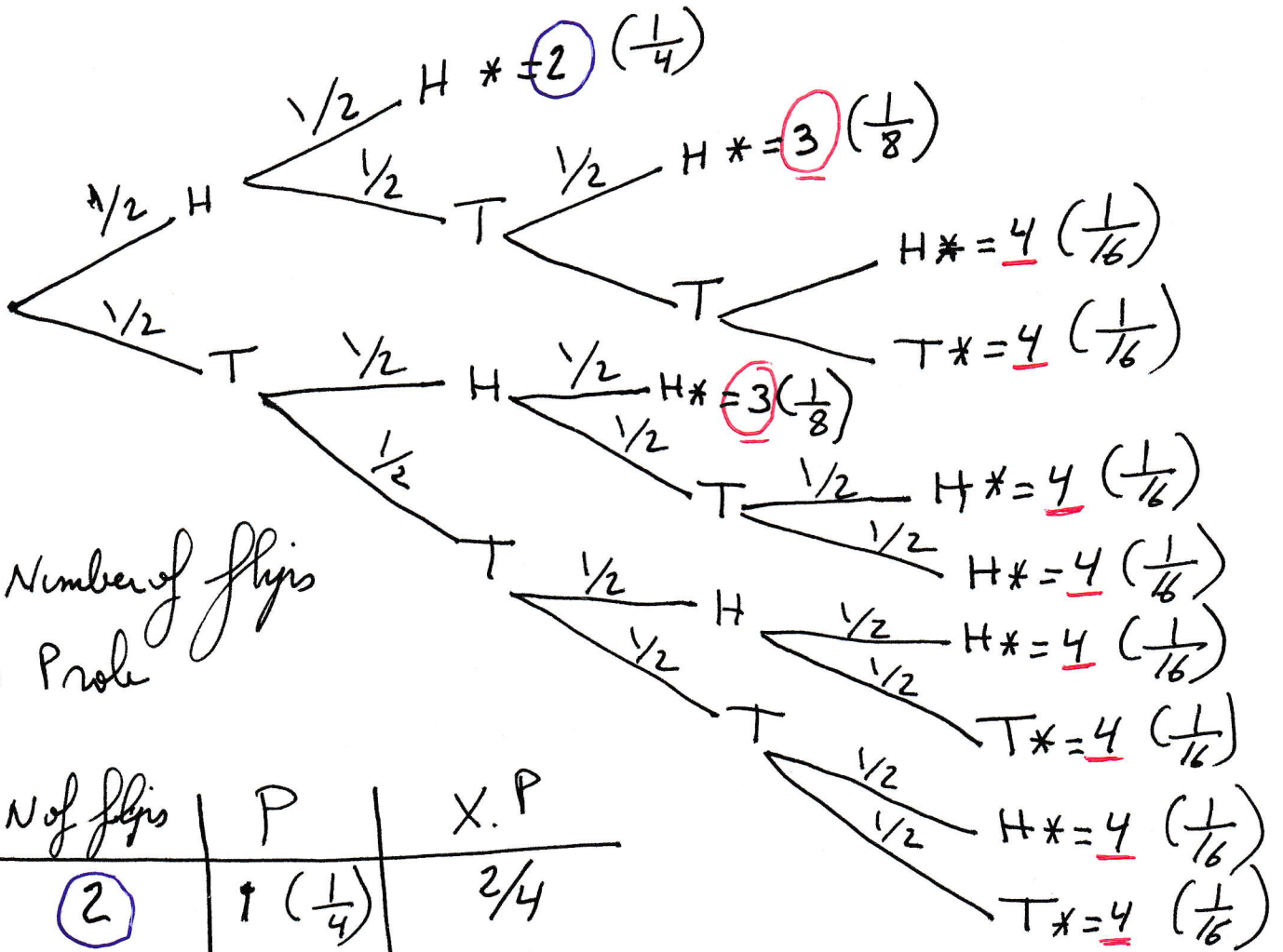


Sec 5.2

13) Fair Coin flipped Until 2H or 4 flips

$X = \# \text{ of flips}$

Possible # of flips = 2, 3, 4 (From the Tree, Draw it first)



$X = \text{N of flips}$	P	$X \cdot P$
2	1 ($\frac{1}{4}$)	2/4
3	2 ($\frac{1}{8}$)	3/4
4	8 ($\frac{1}{16}$)	22/16
	Sum = 1	3.25

Notice:
4 flips possible in 8 ways, each with $P = \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} = \frac{1}{16}$