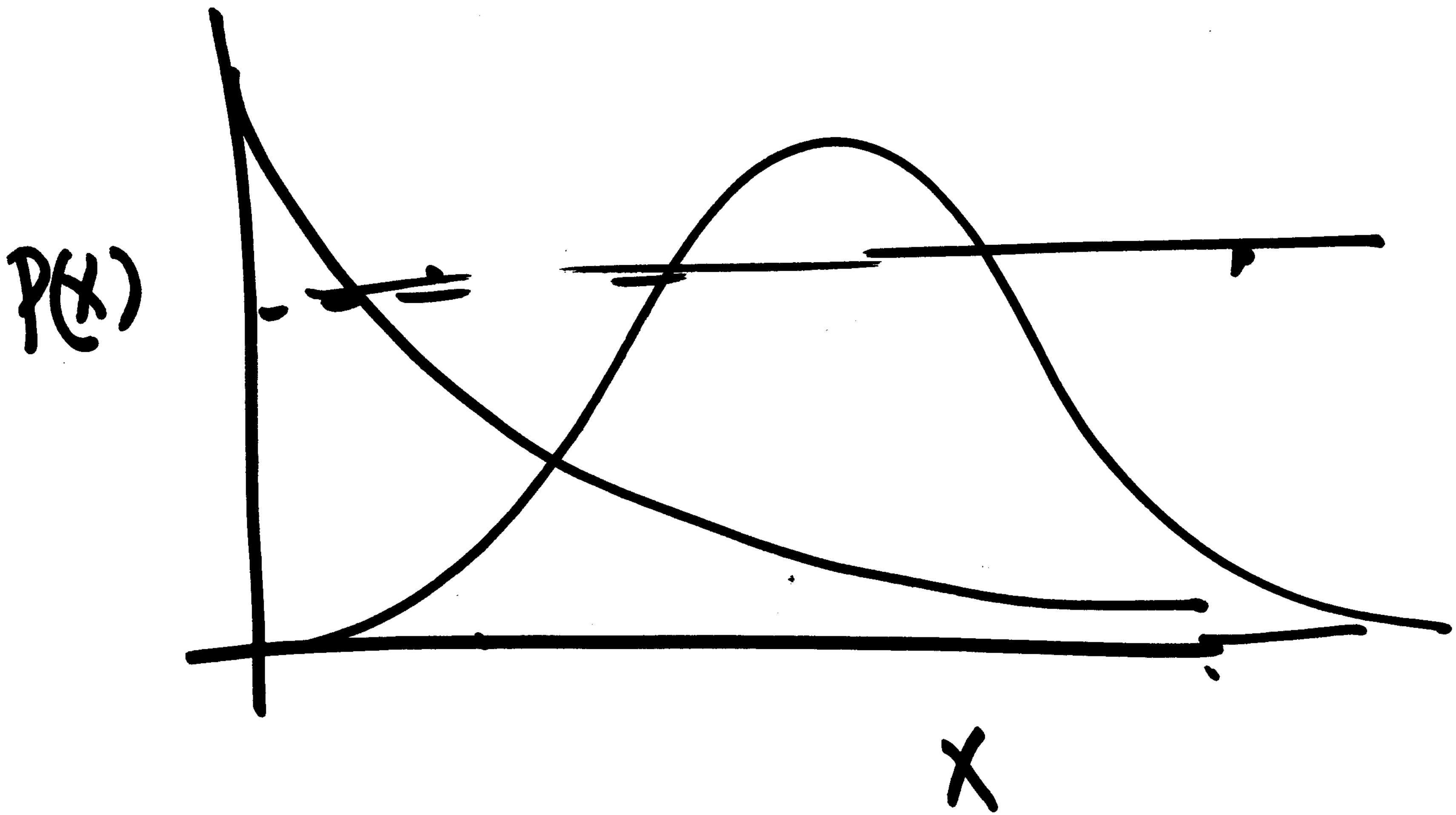
Prof. Ranjit.
Lec - 26
Date - 5/11/2011



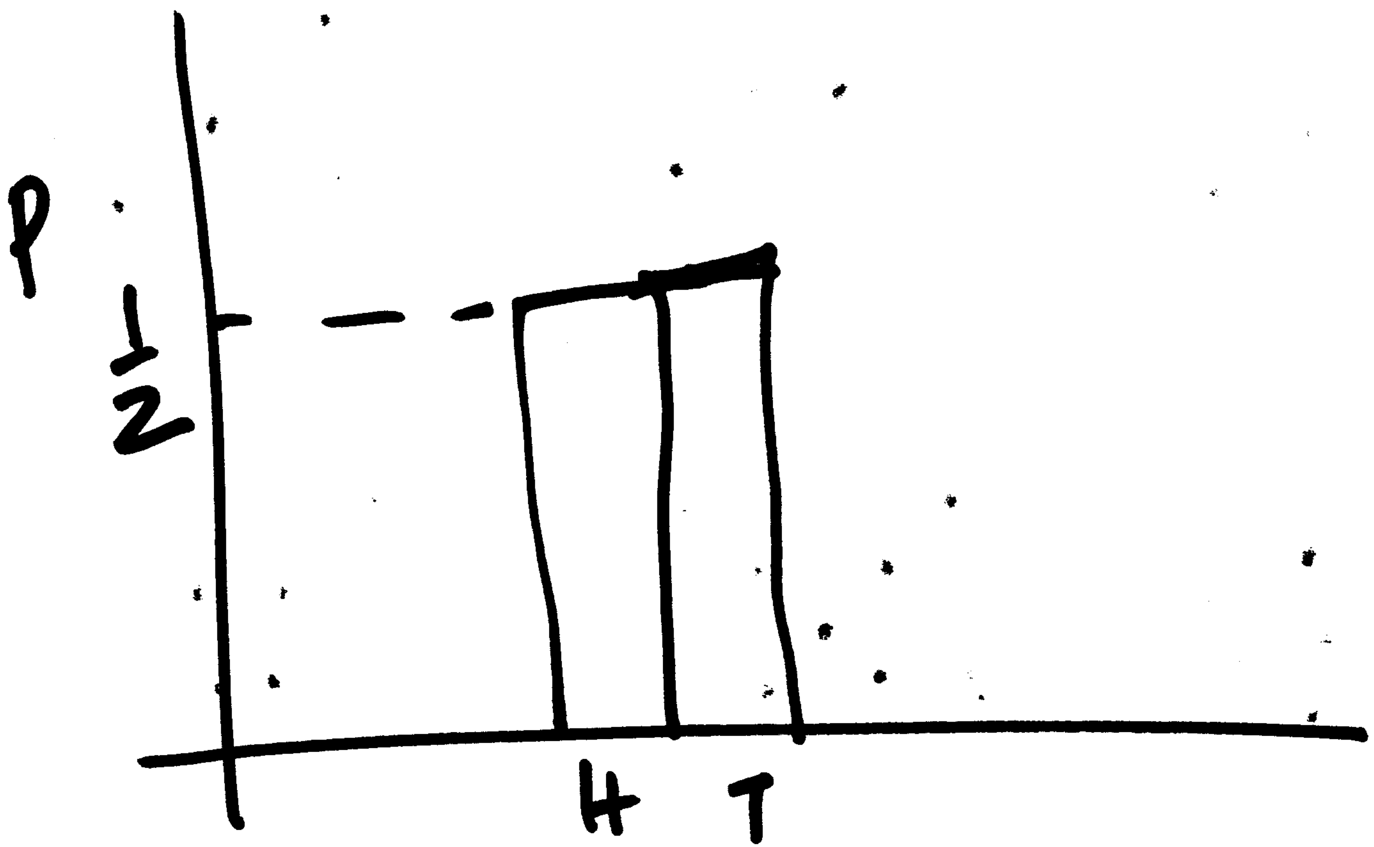
Tossing a Coin

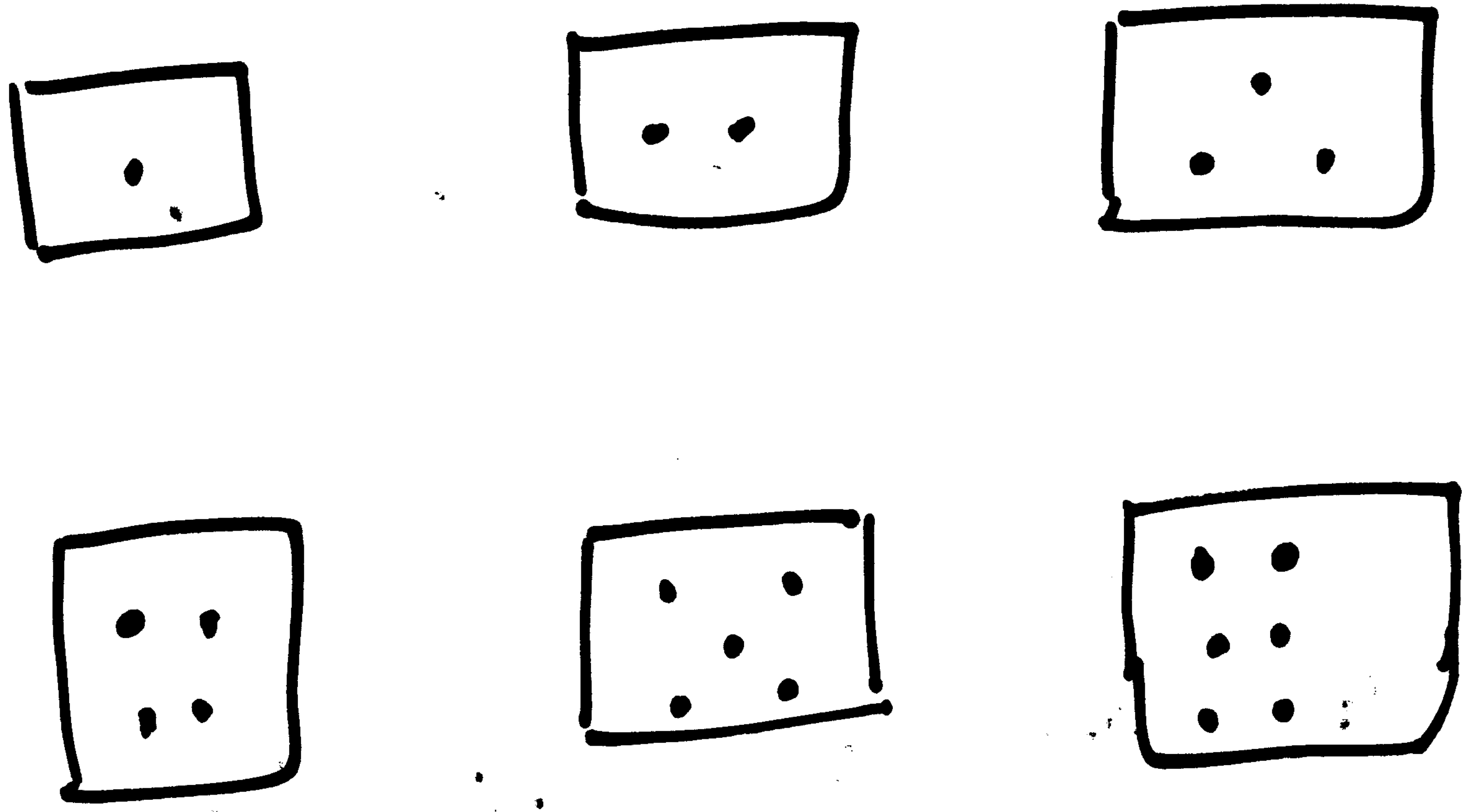
H T

Total 2 outcomes

$$P_H = \frac{1}{2}.$$

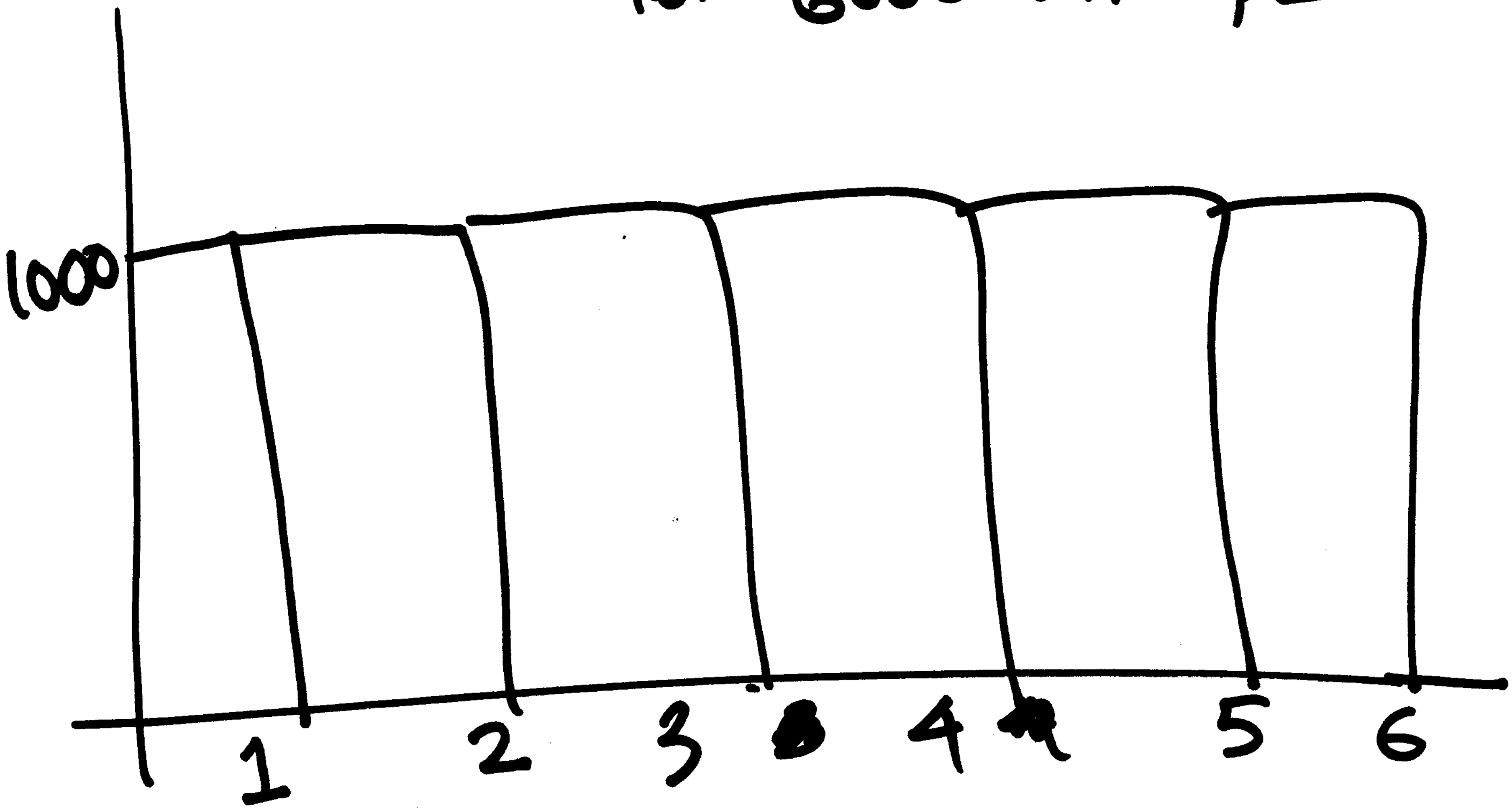
$$P_T = \frac{1}{2}$$


P
1/2
H
T



Total number of outcomes = 6

For 6000 attempts



$$P = \frac{1000}{6000} = \frac{1}{6}$$

$$p(x) = K$$

$$\int p(x)\,dx = 1$$

$$\sum_i P(X_i) = 1$$

$$k = \frac{1}{n} \qquad p = \frac{1}{n}$$

a codon of 3bp

$\boxed{ACT}$

AGA
AAA
ATA
ACA

AAA
GAA
TAA
CAA

$$\cancel{W} = \frac{1}{N} = P$$

$\frac{1}{2} \leftarrow$ H

T

H T

T H

T T ✓

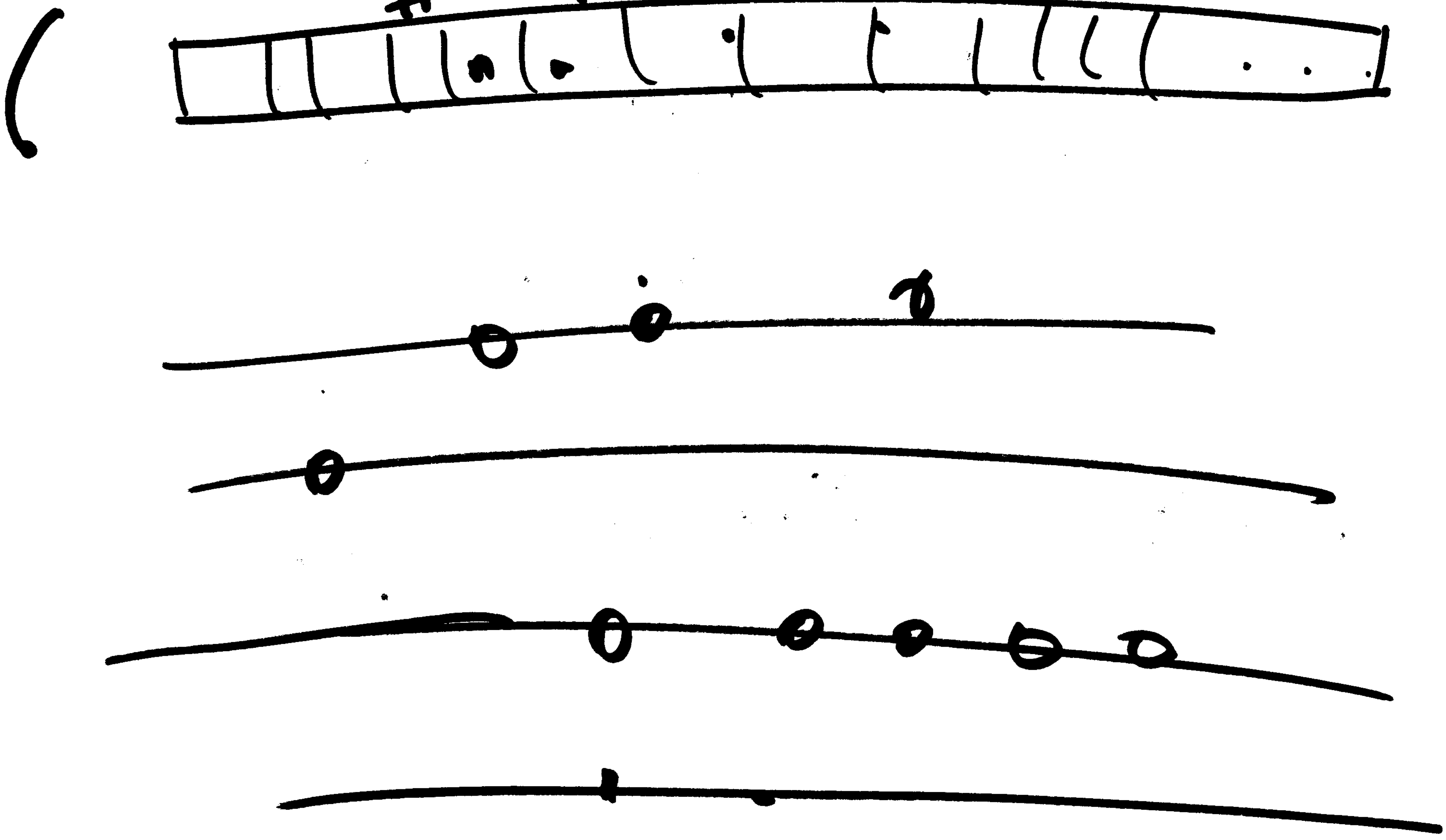
H H ✓

Prob. of getting Same side

$\frac{2}{4} = \frac{1}{2}$

Prob. of getting two Heads $\Big\} = \frac{1}{4}$

average
# of mutations = 4



$$5! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5$$

$$3! = 1 \cdot 2 \cdot 3$$

$$n! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 8 \cdot \cdot \cdot \cdot \; n$$

$$P(r,m) = \frac{m^r e^{-m}}{r!}$$

$$P(10, 6) = \frac{6^{10} e^{-6}}{10!}$$

$$P(11, 6) = \frac{6^{11} e^{-6}}{11!}$$

$$P(12, 6) =$$

$$P(13, 6) =$$

$$\vdots$$

$P(10>)\ \cancel{P} = P(10,6) + P(11,6) + P(12,6) + \dots$

Prob. of getting 10 or more mangoes

$= P(10,6) + P(11,6) + P(12,6) + \dots$

$$P(1, m) =$$

$$P(2, m) =$$

$$P(3, m) =$$

$$\vdots$$

$$\Rightarrow P(1, m) + P(2, m) + P(3, m) + \cdots$$

$$\left.\begin{array}{c} R \\ L \end{array}\right\} \frac{1}{2}$$

$$\left.\begin{array}{cc} R & L \\ R & R \\ \boxed{L \quad L} \\ L & R \end{array}\right\} \quad \frac{1}{4} = \frac{1}{2} \cdot \frac{1}{2}$$

$$P(r, m=3)$$

$$\downarrow$$

$$= 2 \cdot \left(\frac{1}{2}\right)^r$$