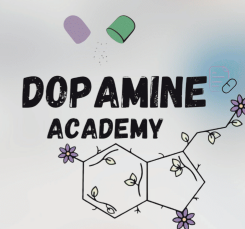


Statistics



Subject: Lecture **11**



Lec 11

Discrete Random Variable "Quantitative"

Random variable $\rightarrow$ sample space $\rightarrow$ الفكرة المحسوبة

numeric outcome $\checkmark$

$x : 2 \quad 1 \quad 1 \quad 0$

$$P(H, H) = \frac{1}{4}$$

ex: $S = \{(H, H), (H, T), (T, H), (T, T)\}$

$x : \text{number of head}$

$$P(x=2) = \frac{1}{4}$$

note:

$$0 \leq P(x=x) \leq 1$$

$$\sum P(x=x) = 1$$

random variable $\rightarrow$

value of random variable $\rightarrow$

Mean "expected value" $E(x) = \sum (x \times P(x))$