

BINOMIAL TABLES

$$P(X) = {}^n C_x \cdot p^x \cdot q^{n-x}$$

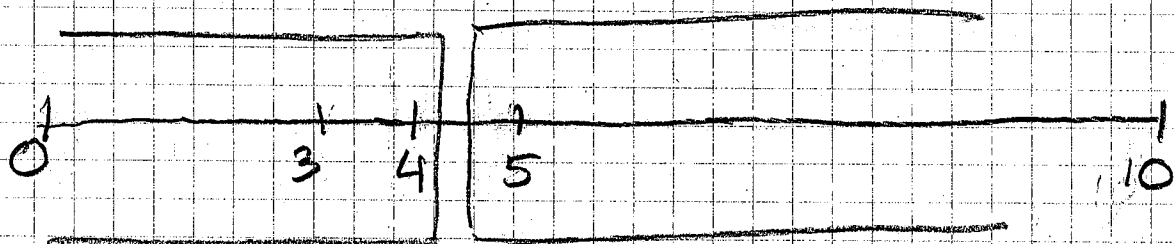
Example: Flipping a coin 10 times.
What is the probability of getting
less than 7 heads?

$$n=10 \quad x=7 \quad p=.5$$

$$P(X < 7) = P(0) + P(1) + \dots + P(6)$$

$$= .828$$

Example: $P(X > 4)$

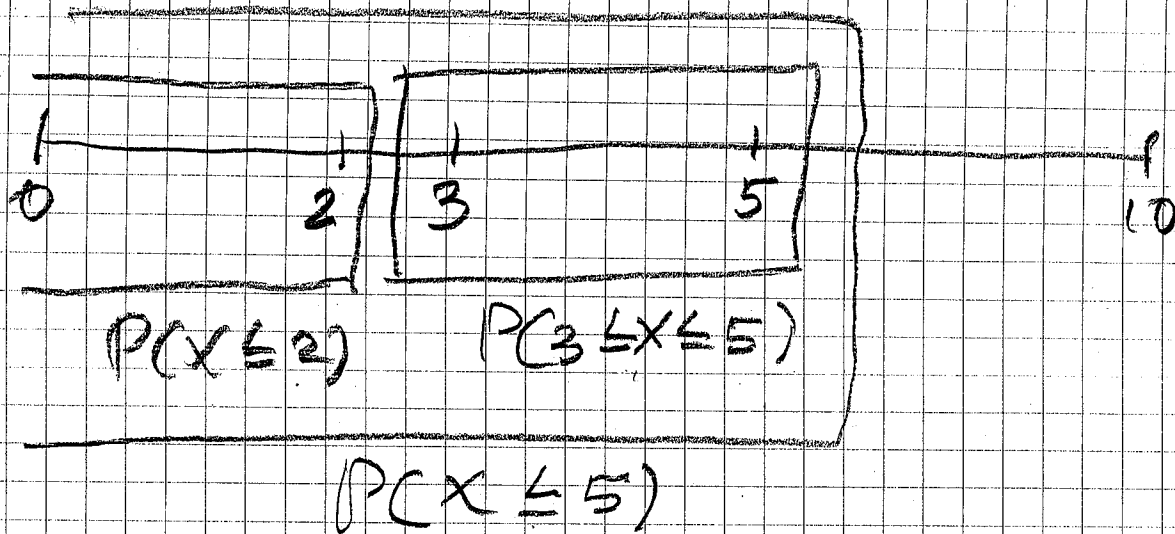


$$P(X \leq 4) + P(X > 4) = 1$$

$$P(X > 4) = 1 - P(X \leq 4) = 1 - .377$$

$$= .623$$

Example: $P(2 < X < 6) = P(3 \leq X \leq 5)$



$$P(3 < X < 5) = P(X \leq 5) - P(X \leq 2)$$
$$= .623 - .055 = .568$$