**Probability 1**

* **The Fundamental Principal of Counting**.
* **Factorials**:

5! = 5 x 4 x 3 x 2 x 1 = 120

* **Arrangements**:

nPr =

* **Choosing**:

nCr =

* **Mutually Exclusive Events**:

EF = Ø P(EF) = P(E) + P(F)

**Note**: Non Mutually Exclusive events:

P(EF) = P(E) + P(F) – P(EF)

* **Conditional probability**:

P(A|B) = or

**Probability 2**

* **Independent Events**:

P(A|B) = P(A)

P(B|A) = P(B)

P(AB) = P(A)P(B)

* **Solve problems involving probability using**:

Tree Diagrams

Venn Diagrams

Multiplying and/or Adding probabilities

Two-Way Tables

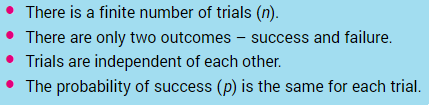
nCr

* **Expected Value**:

E(x) =

* **Binomial Distribution, Bernoulli Trials**:

Page 33 Tables



Also: The Binomial Distribution Extended.

* **The Normal Distribution**:

Page 34 Tables