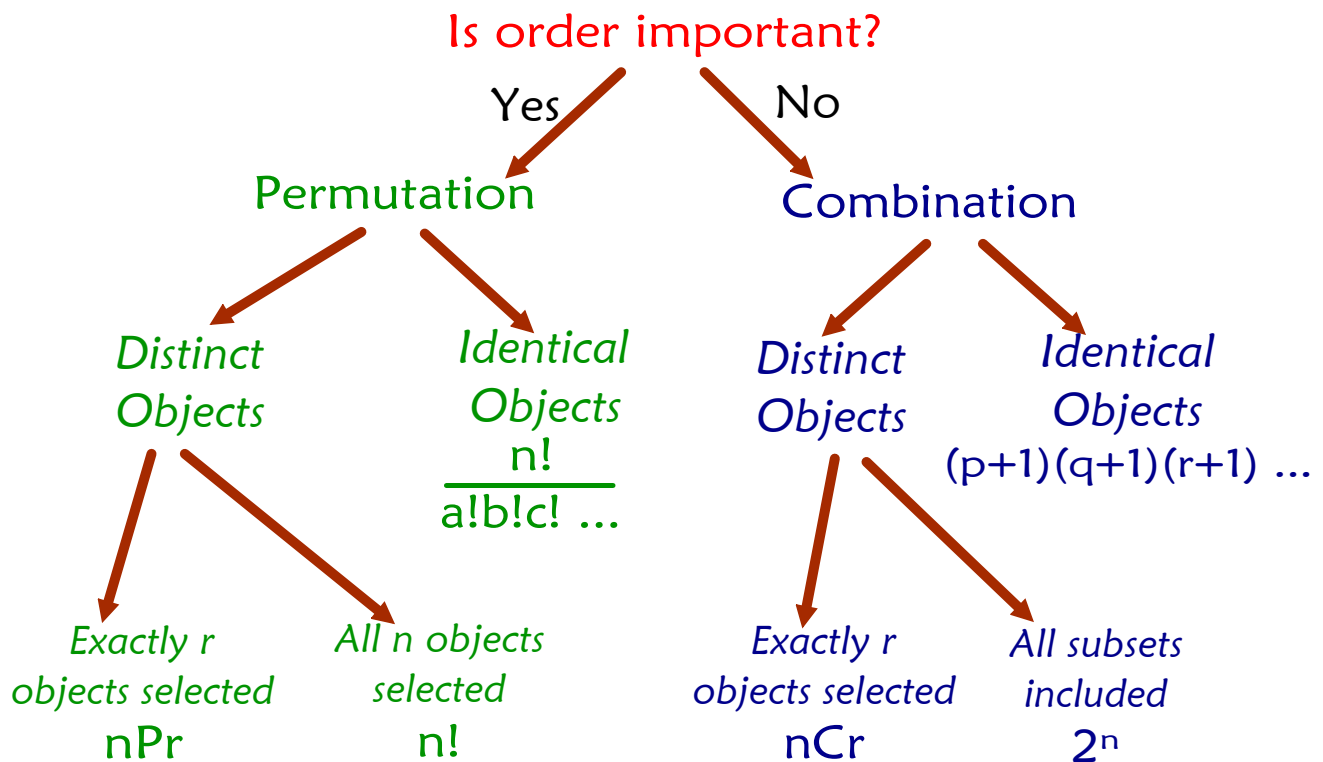


Combinatorics - A Problem Solving Strategy:



Fundamental (Multiplicative) Counting Principle (AND):

Multiple "stages" occurring one after the other.

Additive Counting Principle (OR):

Mutually exclusive cases which cannot occur at the same time.

Empty Set:

If you are counting "at least one" or "some" items
use $2^n - 1$ or $(p+1)(q+1)(r+1)\dots - 1$