

Counting

1. How many different 3-digit numbers can be created using the digit 2 and 7 only?

222

227

272

277

8 Possibilities

722

727

772

777

2. In how many ways can 6 identical coins be distributed among Alex, Bea, and Chad? Note: Some people may receive zero coins

1st – {6,0,0}

$(6-1)(5-2)(4-3)(3-4)(2-5)(1-6)(0-7)$

2nd – {5,1,0}

{5,0,1}

So on ...

3. How many different cars are possible? If Power (Gas, Electric, Hybrid) then color (Red, Black, Blue) and the transmissions are (Automatic, Standard)



TOTAL 18 Possibilities = 3 (power) x 3

(Color)x 2 (Trans)

4. 2 girls and 3 boys. In how many different ways can all five children be seated in a row if the girls must sit on the end chairs?