

12

word : ALLTALK

n Letters = 7

$$\text{Permutations} = \frac{n!}{m_A! m_L! m_T! m_K!}$$

$$= \frac{7!}{2! \cdot 3!} = \frac{5040}{12} = \underline{\underline{420}}$$

With two A's next to each other;

- Put the two A's "into" one letter

$$\frac{6!}{3!} = 6 \cdot 5 \cdot 4 = \underline{\underline{120}}$$

- There are 2! permutations of "aa"

which gives us nPermutations : $120 \cdot 2 = \underline{\underline{240}}$