

**Answer on Question #75727 – Math – Discrete Mathematics**

Firstly, there are  $\binom{5}{3} = 10$  different ways of choosing three people to sit at the table. Once we pick three people A, B and C to sit at the table. There are  $\frac{\text{ways to sit three people in a row}}{\text{ways to rotate the table}} = \frac{\text{ways to sit three people in a row}}{\text{number of chairs}} = \frac{3!}{3} = 2$ , ways to sit 3 people at a circular table. Hence, there are  $10 \times 2 = 20$  3-permutations of 5 people.