

$$\text{Let } S_m := \frac{\pi^2}{6} - \sum_{i=1}^m \frac{1}{i^2}$$

Then:

$$P_{insq}(T, i) := \frac{1}{S_{2T-1}} \cdot \frac{1}{(i + 2T - 1)^2}$$

$$C_{insq}(T, i) = \frac{(i + 2T - 1)^2}{(i + 2T)^2}$$