

Spicy Question #26



740 students in a school were asked which local supermarkets they had visited in the last week. The local supermarkets are Sinsbury's, Cosda and Tanco.

The number of students who visited all three supermarkets is a multiple of 3.

All students who visited Sinsbury's **and** Cosda also visited Tanco.

Half of the students who visited Cosda **and** Tanco also visited Sinsbury's.

$\frac{6}{7}$ of the students who visited Cosda also visited another supermarket.

20 students visited Sinsbury's **and** Tanco.

60 students visited Tanco.

The number of students who visited Sinsbury's is the same as the number who visited both Cosda **and** Tanco.

The number of students who visited none of the supermarkets is equal to the product of the number who visited Sinsbury's and the number who visited Cosda.

Two students from the school are selected at random.

What is the probability that both students **only** visited Tanco.

Give your answer to 4 significant figures.



Calculator allowed

SUBMISSION DEADLINE 4/2/23 - 7PM

Video
Solution



All submissions to be emailed to 1stclassmaths@gmail.com

Full terms and conditions: www.1stclassmaths.com/spicy-questions