Name: _____ 5-a-day Higher

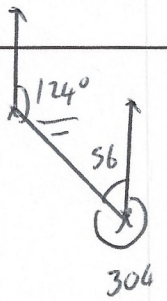
28th August

Corbettmaths

The bearing of Leek from Milton is 304°

Find the bearing of Milton from Leek.

$304 - 180 = 124°$



Jay is organising a party.
People will sit at circular tables.

Each table has a diameter of 110cm
Each person needs 70cm around the circumference of the table.

140 people will be at the party.

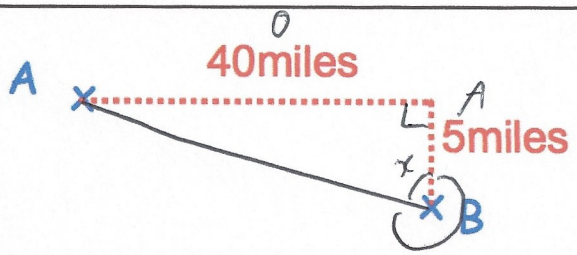
How many tables are needed?

$\pi \times 110 = 345.57...$ cm

$345.57... \div 70 = 4.93...$

4 per table.

$140 \div 4 = 35$ tables

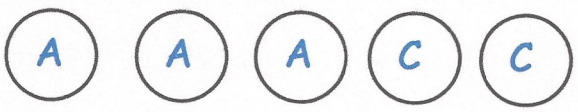


Calculate bearing of A from B.

$\tan x = \frac{40}{5}$

$x = 82.87...$

$277.125°$



A counter is selected at random, the letter recorded and the counter put back into the bag. A second is then selected.

What is the probability that both letters are the same?

$P(AA) = \frac{3}{5} \times \frac{3}{5} = \frac{9}{25}$

$P(CC) = \frac{2}{5} \times \frac{2}{5} = \frac{4}{25}$

$P(\text{same}) = \frac{13}{25}$

Write 0.0393939393... as a fraction

$x = 0.039393939...$

$10x = 0.393939...$

$1000x = 39.393939...$

$990x = 39$

$x = \frac{39}{990} = \frac{13}{330}$