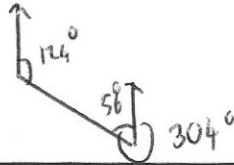




The bearing of Leek from Milton is  $304^\circ$

Find the bearing of Milton from Leek.



$124^\circ$

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?

$$\begin{aligned} \pi \times 110 &= 345.57... \text{ cm} \\ 345.57... \div 70 &= 4.93... \\ &\text{4 per table} \\ 140 \div 4 &= 35 \text{ tables} \end{aligned}$$

Solve, to 2 decimal places

$$4x^2 - 3x - 9 = 0$$

$$a = 4 \quad b = -3 \quad c = -9$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\frac{3 \pm \sqrt{9 - (-144)}}{8}$$

$$\frac{3 \pm \sqrt{153}}{8}$$

$$x = 1.92 \quad \text{or} \quad x = -1.17$$

Here are six number cards.



Charlie takes a card at random and then replaces it. Charlie then takes a second card at random.

Work out the probability that the two cards will add together to give 9.

$$P(5 \text{ and } 4) = \frac{1}{2} \times \frac{1}{6} = \frac{1}{12}$$

$$P(4 \text{ and } 5) = \frac{1}{6} \times \frac{1}{2} = \frac{1}{12}$$

$$\frac{2}{12} = \frac{1}{6}$$

Write  $0.0\dot{3}\dot{9}$  as a fraction

$$x = 0.03939...$$

$$10x = 0.3939...$$

$$1000x = 39.3939...$$

$$990x = 39$$

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

$$= \frac{13}{330}$$