### 18th January

Rearrange \( y + 3 = x(y + 2) \) to make \( y \) the subject of the formula.

\[
\vec{AB} = \begin{pmatrix} 2 \\ 4 \end{pmatrix}
\]

Write down a vector that is perpendicular to \( AB \) and the twice the length.

After a reduction of 3% in the original price, a motorbike is sold for £700.
Both of these values are correct to one significant figure.

Calculate the greatest possible original price before the reduction was applied.

Rebecca has 9 cards, each with a number on it.

She picks three cards at random, without replacement.
Rebecca multiplies the three numbers to get a score.

Calculate the probability that the score is an even number.