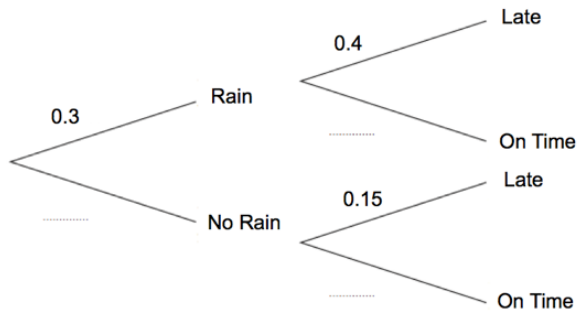**25th December**

Corbettmaths

Expand and simplify

4y(y + 3) − 2y(y − 5)

Find the probability of it raining and the bus being late

In a small village, one bus arrives a day.
The probability of rain in the village is 0.3.
If it rains, the probability of a bus being late is 0.4.
If it does not rain, the probability of a bus being late is 0.15.

Find the probability of the bus being on time

The time, T, taken to serve the guests at a wedding is inversely proportional to the number of waiters, w.

Explain why.

The time is calculated by

$$T = \frac{300}{w}$$

Work out how long it would serve the guests if there were 15 waiters.