

25th December



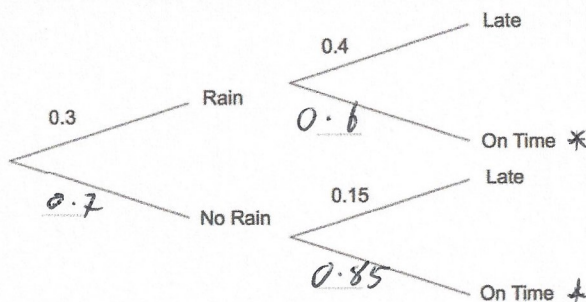
CorbettmOths

Expand and simplify

$$4y(y + 3) - 2y(y - 5)$$

$$4y^2 + 12y - 2y^2 + 10y$$

$$2y^2 + 22y$$



Find the probability of it raining and the bus being late

$$0.3 \times 0.4 = 0.12$$

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

$$0.3 \times 0.6 = 0.18$$

$$0.7 \times 0.85 = 0.595$$

+

$$0.775$$

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

Explain why.

As the number of waiters increases, the time taken to be served decreases

The time is calculated by

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

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

$$T = \frac{300}{15} = 20 \text{ minutes}$$