

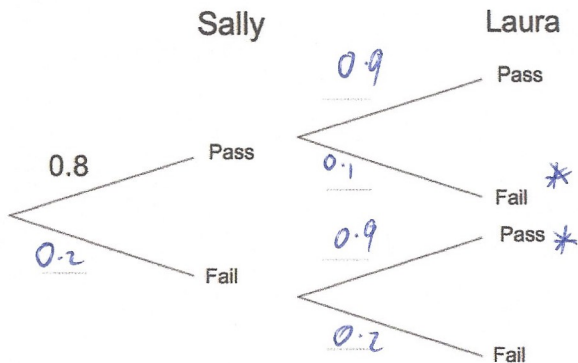
29th August



Corbettmaths

The probability of Sally passing an exam is 0.8
The probability of Laura passing an exam is 0.9

Complete the tree diagram

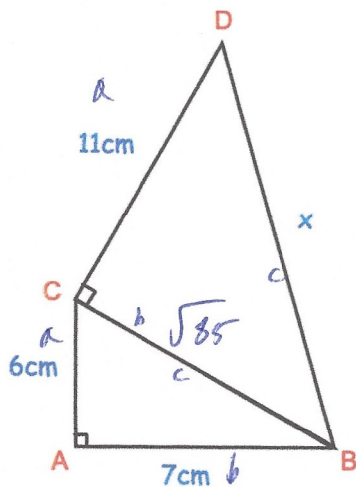


Find the probability that only one girl passes.

$$0.8 \times 0.1 = 0.08$$

$$0.2 \times 0.9 = 0.18$$

$$\begin{array}{r} 0.08 \\ + 0.18 \\ \hline 0.26 \end{array}$$



Find the length of DB

$$a^2 + b^2 = c^2$$

$$6^2 + 7^2 = c^2$$

$$85 = c^2$$

$$c = \sqrt{85}$$

$$a^2 + b^2 = 80^2$$

$$11^2 + (\sqrt{85})^2 = 80^2$$

$$121 + 85 = 80^2$$

$$206 = 80^2$$

$$BD = \sqrt{206} \approx 14.353 \text{ cm}$$

James weighed 100kg.
His target was to weigh 80kg or less.
His weight decreased by 3% each month.
Has he achieved his target after six months?
Show your workings.

$$100 \times 0.97^6 = 83.297$$

No