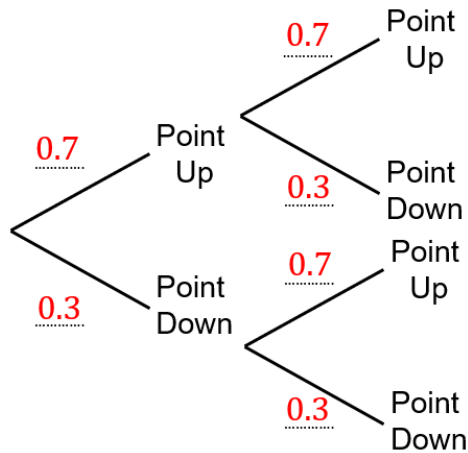


(a)

When a drawing pin is thrown, it can land point up or point down. The probability that the drawing pin lands point up is 0.7. Maya throws the drawing pin twice.

(i) Complete the tree diagram.



(ii) Work out the probability that the drawing pin lands point up both times.

0.49

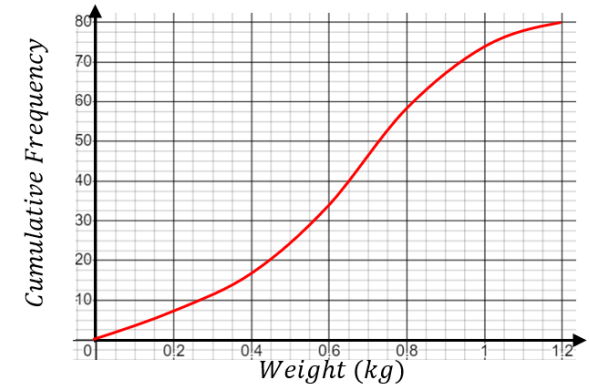
(iii) Work out the probability that the drawing pin lands point up exactly once.

0.42

(b)

The table gives information about the birth weights of 80 piglets.
(i) Complete a cumulative frequency graph.

Weight w (kg)	Cumulative frequency
$0 \leq w < 0.2$	8
$0.2 \leq w < 0.4$	17
$0.4 \leq w < 0.6$	33
$0.6 \leq w < 0.8$	58
$0.8 \leq w < 1$	74
$1 \leq w < 1.2$	80



(ii) Use the graph to estimate the median and interquartile range of the weights of the piglets.

Median \approx 0.65 kg IQR \approx 0.38 kg

(c)

Here is a list of ages of the fifteen students in a school library on a Monday lunchtime.

12 9 15 16 10 9 11 10 9 13 15 10 8 17 15

(i) Find the median age.

11

(ii) Find the interquartile range of the ages.

6

(d)

Complete the histogram for the information in the table.

Height h (cm)	Frequency
$10 \leq h < 30$	8
$30 \leq h < 40$	18
$40 \leq h < 50$	24
$50 \leq h < 60$	20
$60 \leq h < 100$	12

