

- 16** Abi, Ben and Carl each drop a number of identical drawing pins, and count how many land with the pin upwards. The table shows some of their results.

	Number of pins dropped	Number landing 'pin up'
Abi	10	4
Ben	30	9
Carl	100	35

- (a)** Abi says

As a drawing pin can only land with its pin up or with its pin down,  
the probability of a drawing pin landing 'pin up' is  $\frac{1}{2}$ .

Criticise her statement.

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..... [1]

- (b)** Carl's results give the best estimate of the probability of a drawing pin landing 'pin up'. Explain why.

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..... [1]

- (c)** Two pins are dropped.

Estimate the probability that both pins land 'pin up'.

**(c)** ..... [2]