10 John and Jake think a dice is biased.

They both roll the dice a number of times.

The table below shows the results of their trials.

	Number of trials	Number of sixes	Relative frequency
John	60	13	
Jake	150	44	

- (a) Calculate the relative frequencies, to 2 decimal places, for each boy and complete the table. [2]
- **(b)** Explain why Jake's relative frequency gives a more reliable estimate of the likelihood of rolling a six.

Answer\_\_\_\_\_\_ [1]

9. A calculator displays a number in standard form.





Write the number as an ordinary number.

The equation

$$x^3 + 2x = 50$$

has a solution between 3 and 4.

Use trial and improvement to find this solution. Give your answer correct to 1 decimal place. You must show all your working.

A and B are two points.

$$A_{x}$$
  $B$ 

Shade the region which contains those points which are both closer to A than to B, and less than 5cm from B.