

# M8 = 12 days to go!

1 John and Jake roll a dice which 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) Which boy's trials give a more reliable estimate of the likelihood of rolling a six on **this** dice?

**Give a reason for your answer.**

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

$$27^{2/3}$$

.....  
(2)

Write the numbers below in the form  $5^n$

(a) 5

.....  
(1)

(b) 625

.....  
(1)

(c) 1

.....  
(1)

(d)  $\frac{1}{5}$

.....  
(1)

(e)  $\sqrt{5}$

.....  
(1)

(f)  $\sqrt{125}$

.....  
(2)