

**FOUNDATION TIER  
MINI PRACTICE EXAM 3**



**NON-CALCULATOR  
20 MINUTES ALLOWED**

1.  
The head of Year 10 is looking to split the students into 12 equal groups.  
There are 216 students in Year 10.  
Can the students be split into 12 equal groups? And if so, how many students will there be in each group?

$$\begin{array}{r} 018 \\ 12 \overline{) 216} \end{array}$$

Yes - 18

(2)

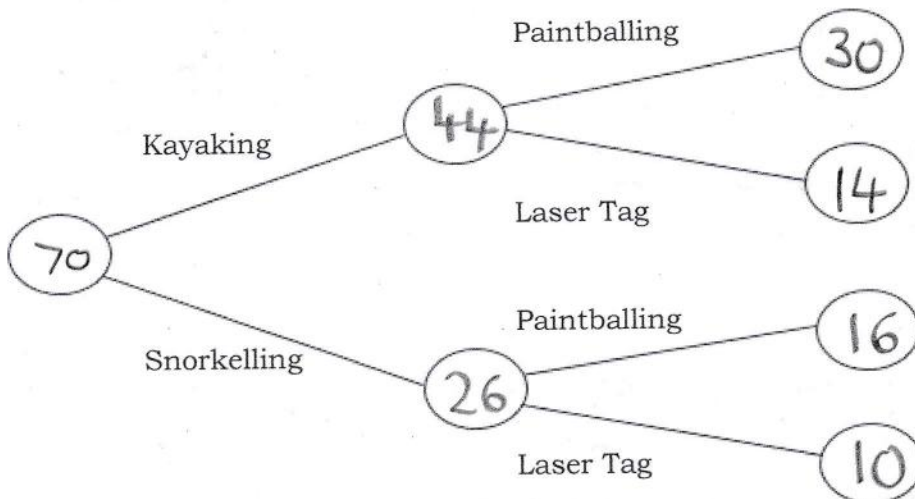
2.  
Harry threw a javelin 29.7 metres.  
Ian threw his javelin 73 centimetres further than Harry.  
How far, in metres, did Ian throw his javelin?

$$\begin{array}{r} 29.70 \\ + 0.73 \\ \hline 30.43 \\ \hline \end{array}$$

30.73 m

(2)

3.  
A group of 70 people chose to do either kayaking or snorkelling, and either paintballing or laser tag.  
44 people chose kayaking.  
16 people chose both snorkelling and paintballing.  
24 people chose laser tag.



(a) Complete the frequency tree.

(4)

(b) What fraction of the people chose paintballing? Give your answer in its simplest form.

$$\frac{46}{70} = \frac{23}{35}$$

(2)

4.

(a) Work out  $\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$

(1)

(b) Work out  $\frac{2}{3} \div \frac{3}{4} = \frac{2}{3} \times \frac{4}{3} = \frac{8}{9}$

(1)

(c) Work out  $\left(\frac{3}{4} \times \frac{1}{2}\right) + \left(\frac{2}{3} \div \frac{3}{4}\right)$

$$\frac{3}{8} + \frac{8}{9} = \frac{27}{72} + \frac{64}{72} = \frac{91}{72}$$

(1)

5.

There are 50 farms.

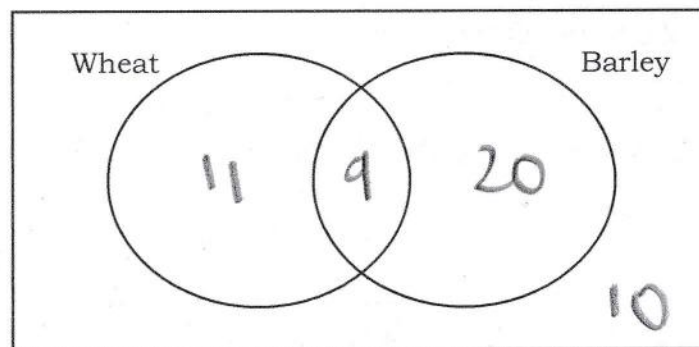
The farms can grow wheat and barley.

$\frac{2}{5}$  of the farms grow wheat.

9 of the farms grow both wheat and barley.

10 of the farms grow neither wheat nor barley.

(a) Complete the Venn diagram.



$$\frac{2}{5} \text{ of } 50 = 20$$

(4)

(b) How many farms grow barley but not wheat?

20

(1)

(c) Of the 50 farms, 14% of them do not have cows.

How many of the farms have cows?

$$14\% \text{ of } 50 = 7$$

$$50 - 7 = \underline{43}$$

(2)