

# REASONING

## 7ER15

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_

Class \_\_\_\_\_

Date of birth ○○ ○○ ○○○○

Date of test ○○ ○○ 2015

Total score  (maximum 20)



128954



Llywodraeth Cymru  
Welsh Government

1 Remember:

White digits  
occur **3 times**



Green digits  
occur **twice**



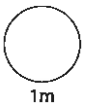
Blue digits  
occur **once**



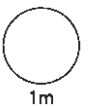
Work out the missing digits.



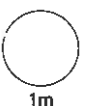
$$\left[ \begin{array}{|c|c|} \hline & 6 \\ \hline \end{array} \right] - \left[ \begin{array}{|c|c|} \hline & \\ \hline \end{array} \right] = \left[ \begin{array}{|c|} \hline 3 \\ \hline \end{array} \right]$$



$$\left[ \begin{array}{|c|c|} \hline & 3 \\ \hline \end{array} \right] - \left[ \begin{array}{|c|c|} \hline & \\ \hline \end{array} \right] = \left[ \begin{array}{|c|} \hline 6 \\ \hline \end{array} \right]$$



$$\left[ \begin{array}{|c|c|} \hline & \\ \hline \end{array} \right] \times \left[ \begin{array}{|c|} \hline \\ \hline \end{array} \right] = \left[ \begin{array}{|c|c|} \hline & \\ \hline \end{array} \right]$$



Write a number sentence for each number-le.

Each number sentence must include =



A number sentence using **multiplication**:



A number sentence using **division**:



A number sentence using **addition**:



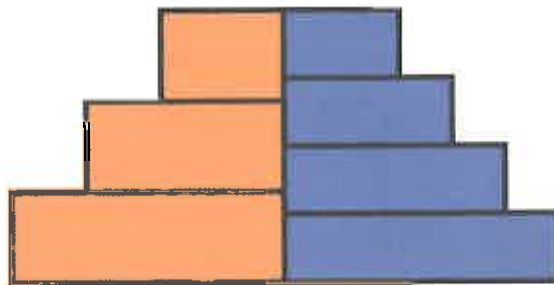
A number sentence using **subtraction**:



TOTAL



- 2 The height of each orange block is 6cm.



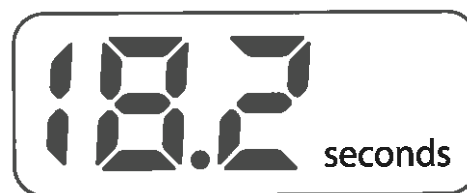
Work out the height of each blue block.

cm



- 3 Steve and Alun run 100m.

Steve runs in this time:



Alun runs **half a second faster** than Steve.

What is Alun's time?

seconds



4

Some children make cards.



The children sell **69** of their cards.


How much profit do they make?

£

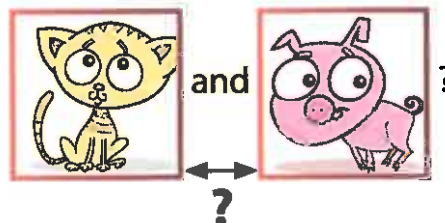
5 Lily has three pictures, all the **same size**.

Two are hanging on the wall.



I want to hang   
It must be **exactly** in the **middle**.

How many centimetres should be between

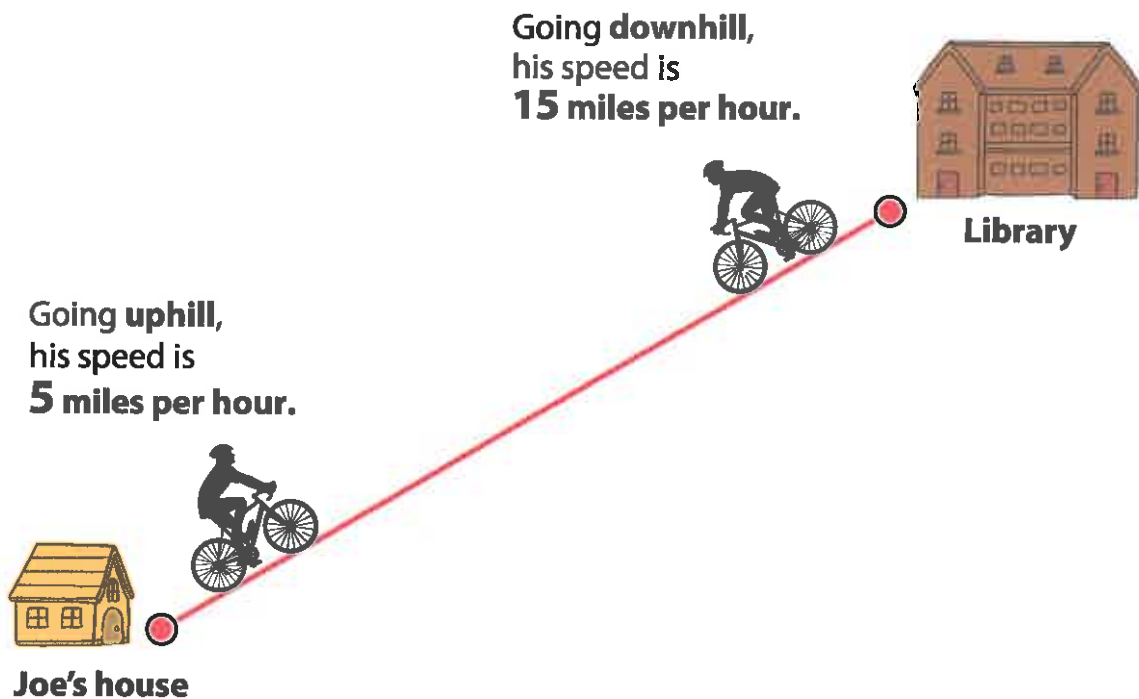


cm



6

Joe cycles to and from the library.



It is **2.5 miles** uphill from Joe's house to the library.

Joe leaves his house at **9:50am.**

He must be home at **11:15am.**

How long can he spend at the library?

minutes



TOTAL



