

REASONING

5ER18

First name _____

Last name _____

School _____

Class _____

Date of birth

Date of test

Total score (maximum 20)



165093



Llywodraeth Cymru
Welsh Government

1

Arwel has 2 cooks.

Each cook has 3 helpers.

Each helper has 4 pans.

Altogether, how many pans are there?



pans



Arwel leaves at 8am.

- Each hour he travels 5 miles.
- Gwen's palace is 30 miles away.

Without the raven's help, at what time would he arrive at Gwen's palace?



He would arrive at



Arwel leaves at 8am.

- Each hour he travels 5 miles.
- Gwen's palace is 30 miles away.

The raven helps!



When you call me I will **double** the distance you have already travelled.



Arwel wants to arrive as quickly as possible.

At what time should he call the raven?



He should call at



TOTAL



- 2 Write the missing digits.

$$\begin{array}{|c|c|} \hline 2 & \square \\ \hline \end{array} + \begin{array}{|c|c|} \hline \square & 2 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 4 & 0 \\ \hline \end{array}$$



$$\begin{array}{|c|c|} \hline \square & 3 \\ \hline \end{array} - \begin{array}{|c|c|} \hline 3 & \square \\ \hline \end{array} = \begin{array}{|c|c|} \hline 6 & 0 \\ \hline \end{array}$$



- 3 A shop sells orange juice.

Small bottle 95p for $\frac{1}{2}$ litre		Large bottle £1.50 for 1 litre
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Brad buys 1 litre in small bottles.

Ryan buys 1 litre in one large bottle.

How much more does Brad pay than Ryan?

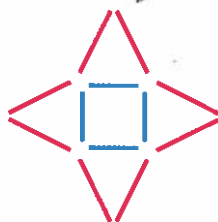


p more

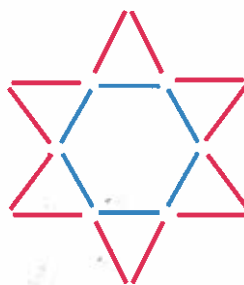


4 Star patterns use 2 red rods with each blue rod.

Examples:



4 blue rods
8 red rods



6 blue rods
12 red rods

Poppy makes a star pattern.

She uses 20 red rods.

How many blue rods does she use?

blue rods



Jamal makes a star pattern.

He uses 120 rods altogether.

How many blue rods and red rods does he use?



blue rods

red rods



TOTAL



5

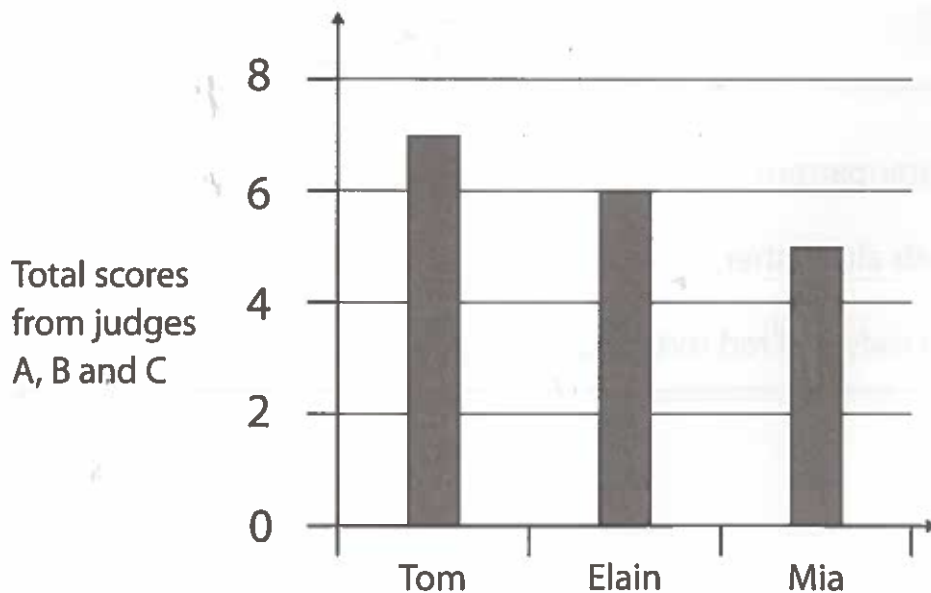
Scores in a singing competition				
	Tom	Elain	Mia	
Judge A	4	3	2	9
Judge B	2	2	1	5

In the table, 4 shows Tom's score from judge A.

In the table, 1 shows

In the table, 9 shows

The chart below shows the **total** scores from judges A, B and also C.



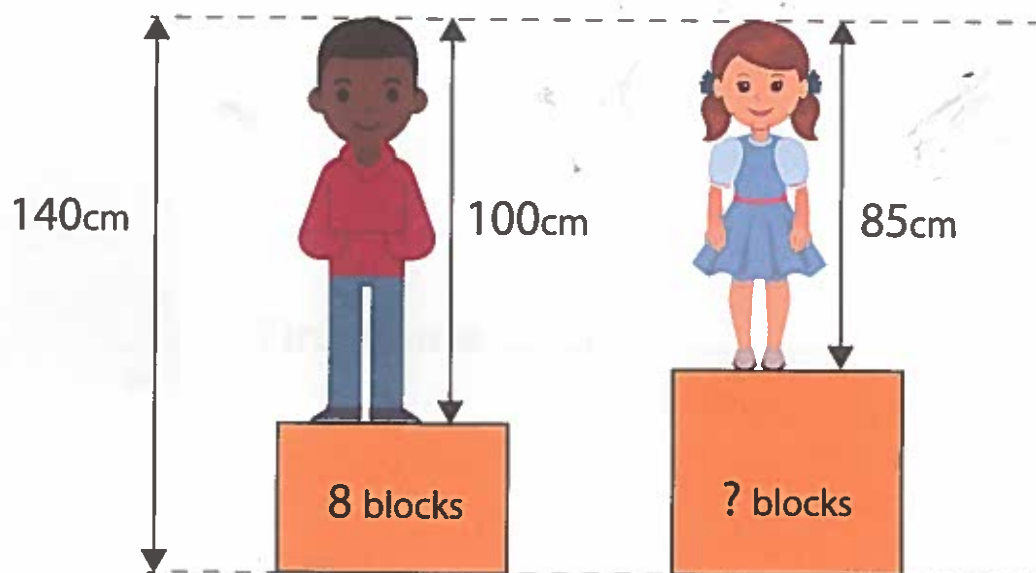
Work out judge C's scores.

	Tom	Elain	Mia
Judge C			

6 Sam and Meg have lots of blocks that are all the same height.

They stand on some of the blocks.

Now they are both 140cm high.



Not drawn to scale

Sam stands on 8 blocks.

How many blocks does Meg stand on?

Show how you work it out.



blocks

3m

TOTAL

7m