REASONING

5ER18

First name _____

Last name _____

School _____

Class _____

Date of birth ⭕⭕ ⭕⭕ ⭕⭕⭕⭕

Date of test ⭕⭕ (0)(5) (2)(0)(1)(8)

Total score ⬭ (maximum 20)

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 |

2m

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

2m

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 [ ]

2 Write the missing digits.

| 2 | | + | | 2 | = | 4 | 0 |

○ 1m

| | 3 | − | 3 | | = | 6 | 0 |

○ 1m

3 A shop sells orange juice.

| Small bottle |
| 95p for $\frac{1}{2}$ litre |

| Large bottle |
| £1.50 for 1 litre |

Brad buys 1 litre in small bottles.

Ryan buys 1 litre in one large bottle.
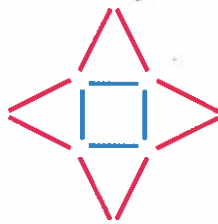
How much more does Brad pay than Ryan?
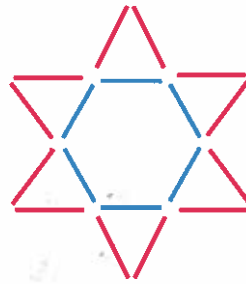
p more

○ 2m

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

1m

Jamal makes a star pattern.

He uses **120** rods altogether.

How many blue rods and red rods does he use?

blue rods

red rods

2m

TOTAL

7m

(5)

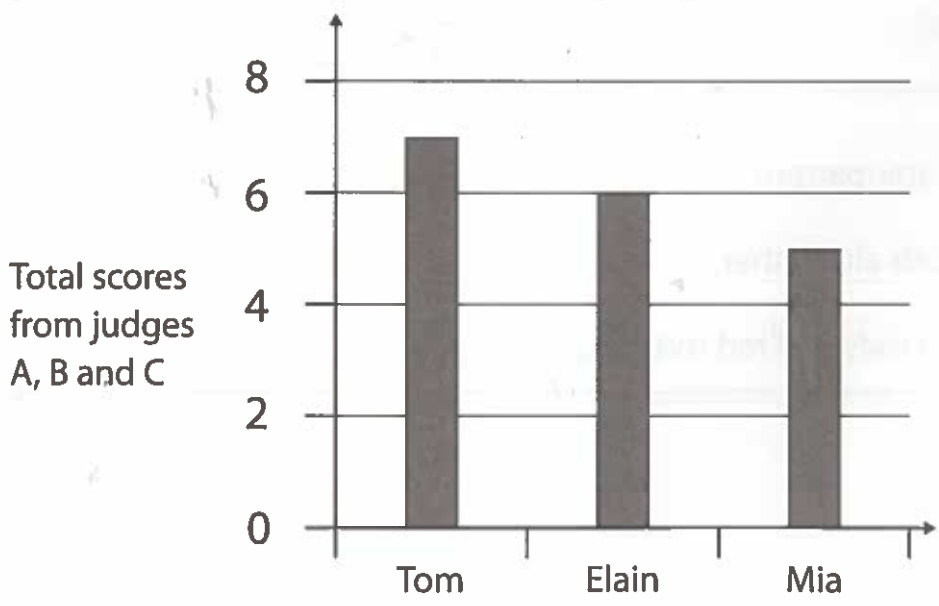| Scores in a singing competition			
	Tom	Elain	Mia	
Judge A	·4	3	2	9
Judge B	2	2	1	5

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

In the table, 1 shows

In the table, 9 shows
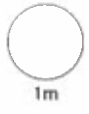
The chart below shows the **total** scores from judges A, B **and also** C.

Total scores from judges A, B and C

Work out judge C's scores.
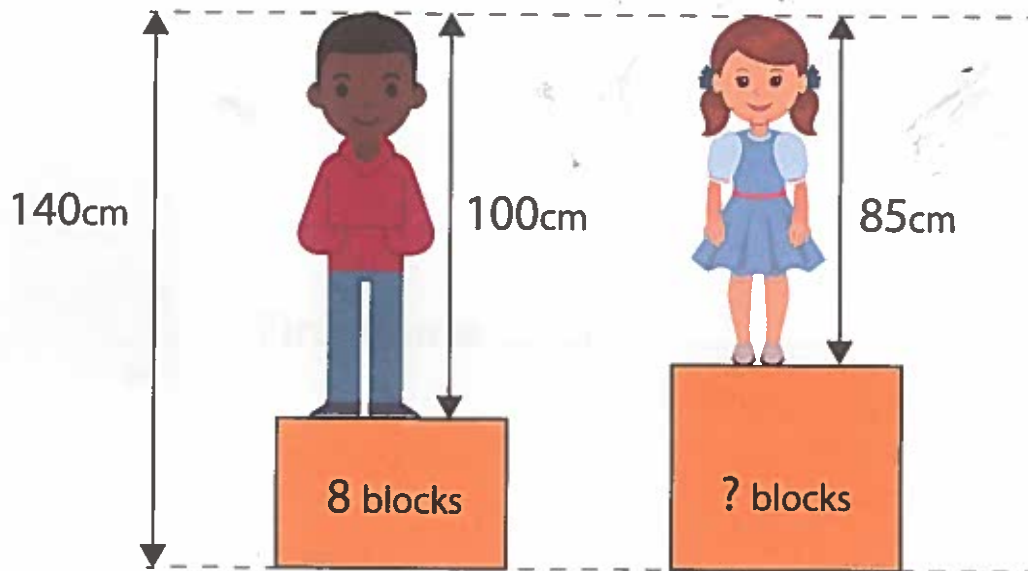
	Tom	Elain	Mia
Judge C			
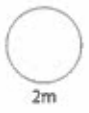
6 Sam and Meg have lots of blocks that are all the same height.

They stand on some of the blocks.

Now they are both 140cm high.

140cm   100cm   85cm

8 blocks   ? blocks

Not drawn to scale

Sam stands on 8 blocks.

How many blocks does Meg stand on?

Show how you work it out.

blocks