REASONING

7ER14

First name _____

Last name _____

School _____

Class _____

Date of birth ⊙⊙ ⊙⊙ ⊙⊙⊙⊙

Date of test ⊙⊙ ⓪⑤ ②⓪①④

Total score ⊂⊃ (maximum 20)

Llywodraeth Cymru
Welsh Government

Joe's board →

1		3	4		6
7	8		10		12
13	14	15	16	17	18
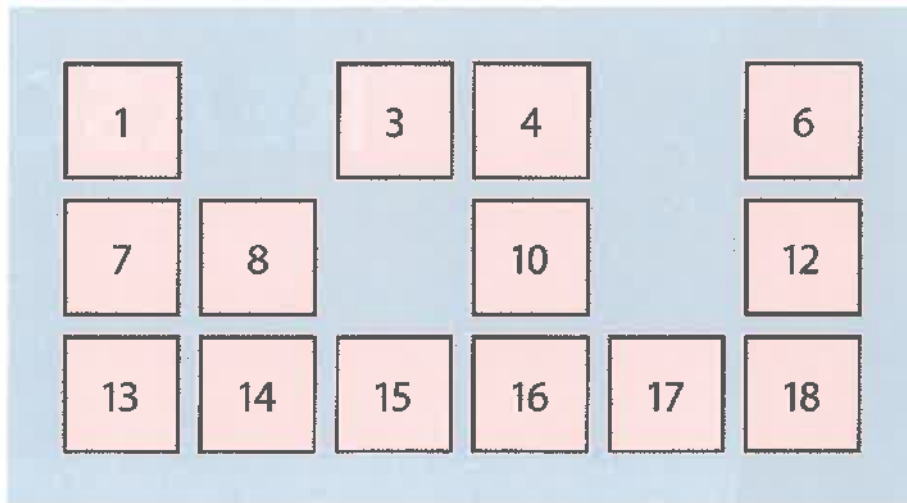
He throws:

Circle **all** the numbers on his board that he can knock out.

Erin's board →

1				5	
		9		11	12
13	14	15	16	17	18
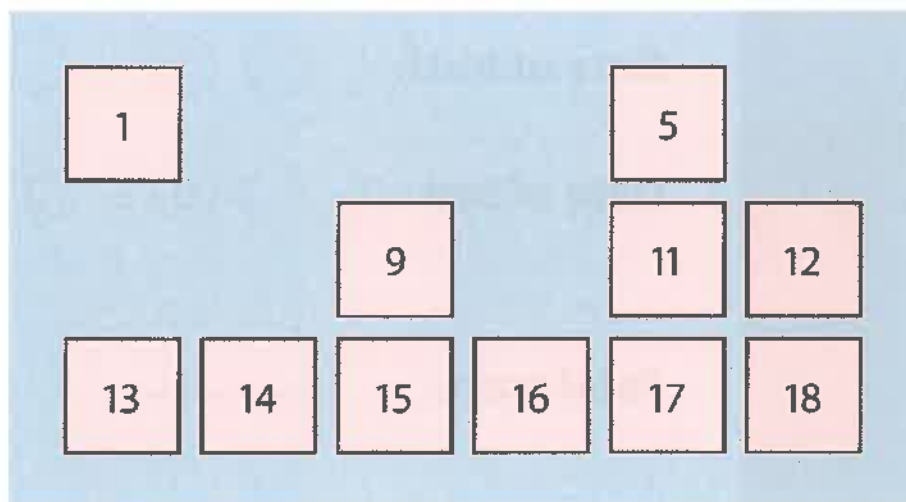
She is going to throw both dice.

Cross (✗) all the numbers on her board that are **not possible** to knock out, whatever she throws.

Lisa says:
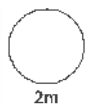
> If both dice show **even** numbers,
> you cannot knock off an **odd** number
> because …
>
> - even + even is always an even
> - even − even is always an even
> - even × even is always an even
> - even ÷ even is always an even.

One of Lisa's four bullets is **not** correct.
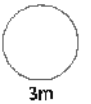
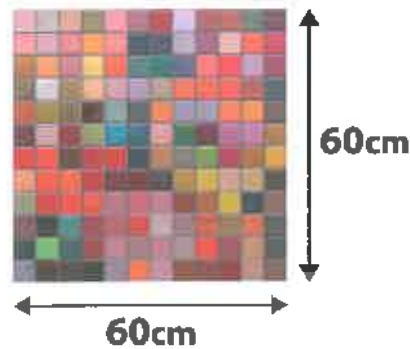Which one?

Show **why** it is not correct.

2m

TOTAL

5m

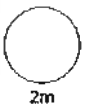**2** David wakes up in the night.

03:15

The digits on my clock **add to 9**

Write **all** the times between **03:30** and **04:30** when the clock shows digits that **add to 9**

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3 **144** small glass tiles cover a square that is **60cm** by **60cm**.
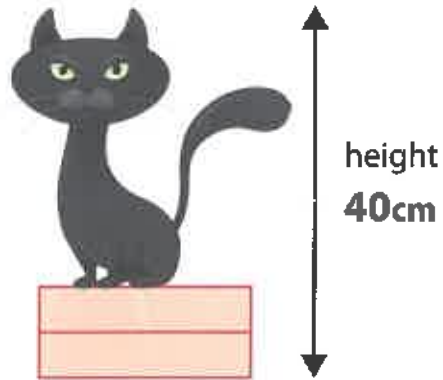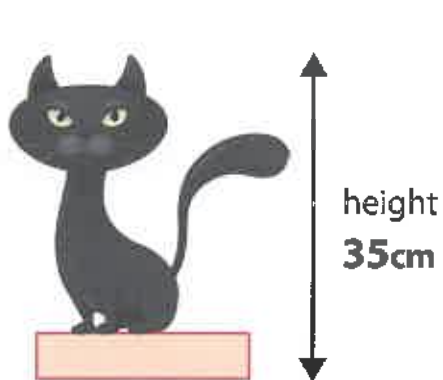
60cm

60cm

How many small glass tiles will cover a rectangle that is **120cm** by **90cm**?

glass tiles

4

4 This cat sits on bricks.

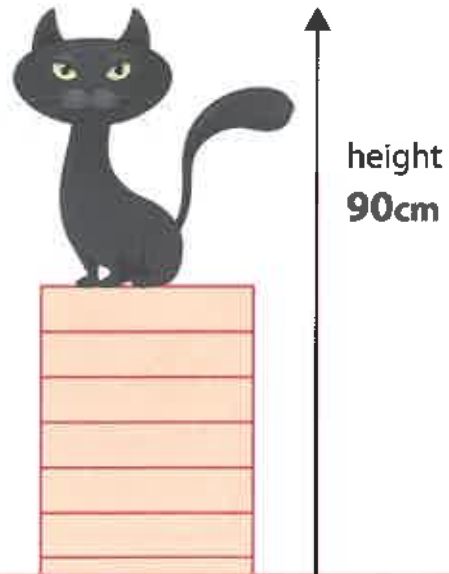All the bricks are the same height.

height
35cm

height
40cm

Now the cat sits on more bricks.

You cannot see all the bricks.

The total height is **90cm**.

Work out how many bricks there are.

height
90cm

| | bricks |

5 Children are planning their school fete.

They will raise money by selling ice creams in cones.

One 2 litre tub of ice cream costs £1.75

One packet of 10 cones costs 40p.

We will put 100ml of ice cream into each cone.

We must buy enough to make 100 ice creams.
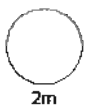
We will sell each ice cream for 50p.

Work out what the children need to buy and the total cost.
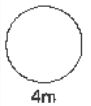
They sell all **100** ice creams.

How much profit have they made?

£

4m

2m

TOTAL

6m