**Q1.**

A dragon lived in a cave.

The dragon **doubled** in size every day.

After **20 days** the dragon filled the cave.

After how many days did the dragon **half-fill** the cave?

**19**

1 mark

**Q2.**

The rule to get each number in a sequence is



Here is part of the sequence.

Write the two missing numbers.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   | **20** | 40 | 30 | 35 | 32.5 | 33.75 | **33.125** |

2 marks

**Q3.**

Amy thought of a number.

She added 0.5 to her number and then doubled the result.

Then she subtracted 0.5 and doubled the new result.

Her final answer was 61

What number did Amy start with? **15**

2 marks