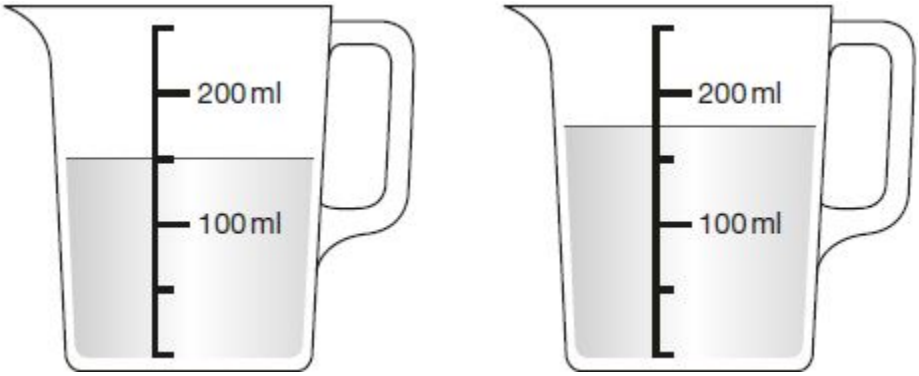
1. Stefan has **600 millilitres** of water in a bottle.

He pours some of the water into two measuring jugs as shown.



How many millilitres of water are left in Stefan's bottle?

Show your method

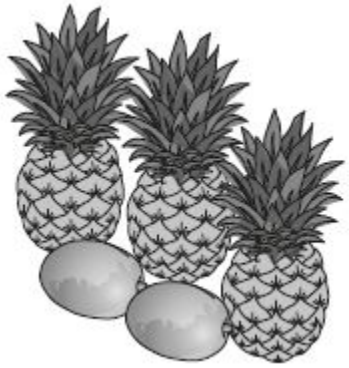
ml

2 marks

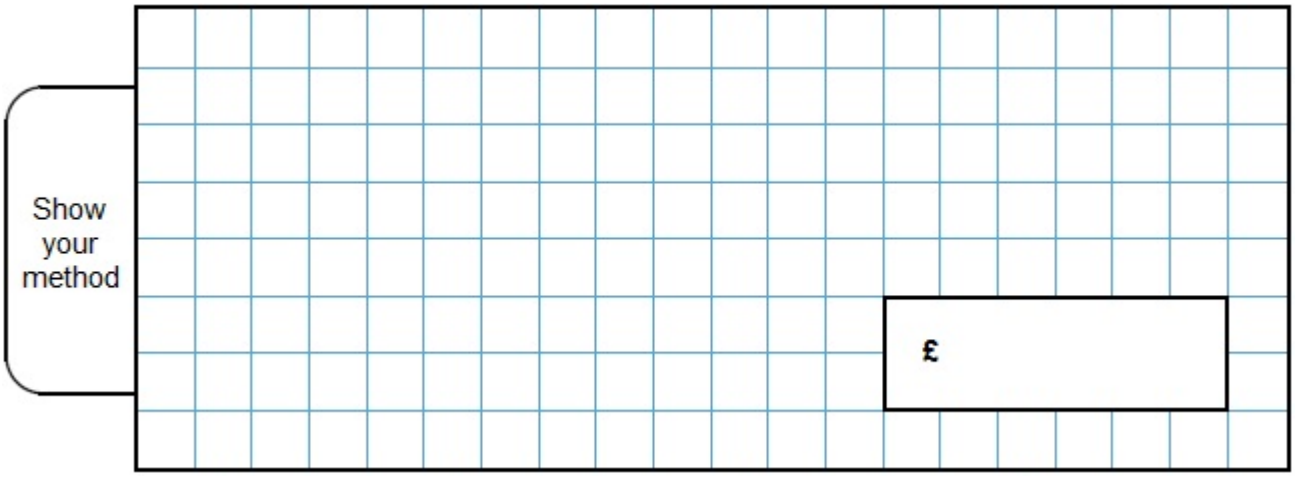
2.

3 pineapples cost the same as 2 mangoes.

One mango costs £1.35



How much does **one** pineapple cost?

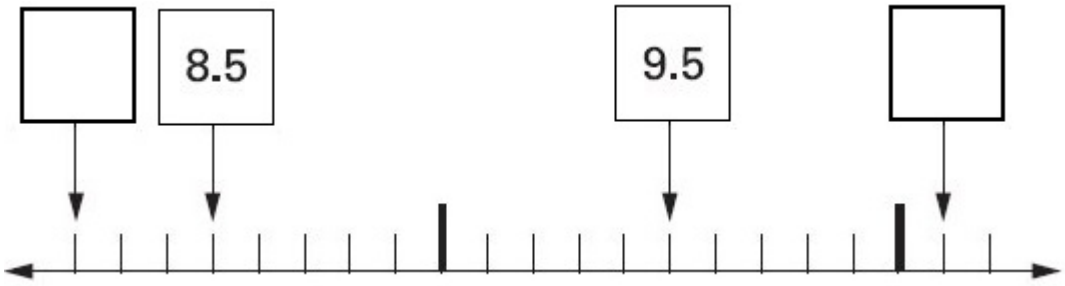


2 marks

3.

Here is part of a number line.

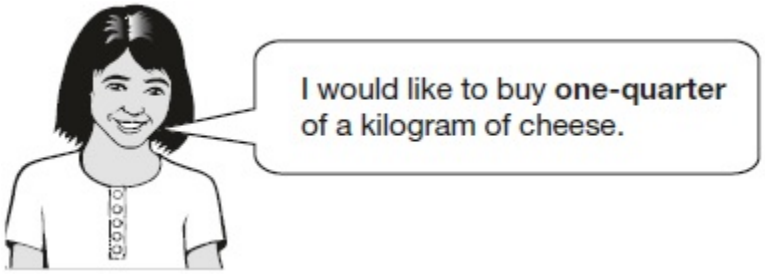
Write in the numbers missing from the **two** empty boxes.



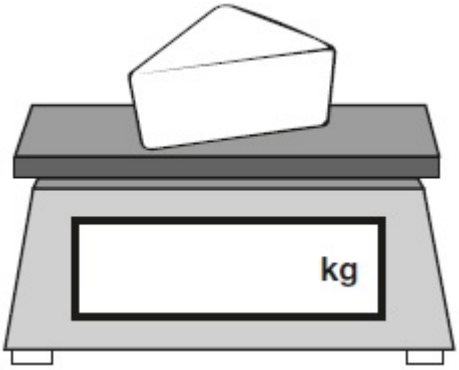
2 marks

4. Amina is shopping.

She says,



Write one-quarter on the scales as a decimal.



1 mark

The cheese costs £1.35

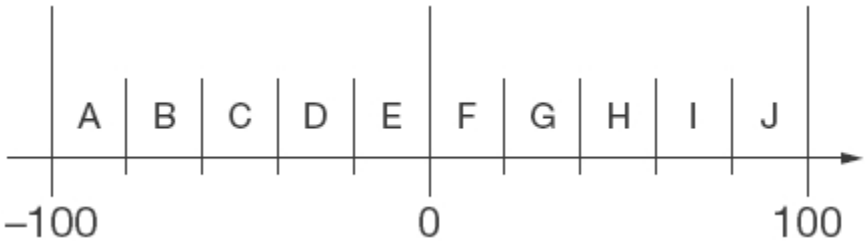
Amina pays with a £2 coin.

How much change should Amina get?

1 mark

5. Here is part of a number line.

It is divided into equal sections.



Write the letter of the section where each of these numbers belongs.

The number 99 has been done for you.

number	section
99	J
29	
–83	
–15	
44	

2 marks

6.

7,546

Round this number:

to the nearest 1,000 ☐

to the nearest 100 ☐

to the nearest 10 ☐

2 marks

7. Layla wants to estimate the answer to this calculation.

$$3\frac{9}{10} - 2\frac{1}{8} + 1\frac{4}{5}$$

Tick the calculation below that is the best estimate.

Tick **one**

3 − 2 + 2 ☐

4 − 2 + 1 ☐

4 − 2 + 2 ☐

3 − 2 + 1 ☐

1 mark

8. At the end of a film, the year is given in Roman numerals.

Write the year MMVI in **figures**.

1 mark

9.

The temperature **inside** an aeroplane is **20 °C**.

The temperature **outside** the aeroplane is **–30 °C**.

What is the **difference** between these temperatures?

degrees

1 mark

10. Look at these numbers written in Roman numerals.

One is not written correctly.

Put a cross (✗) on it.

MMCM MCMM MMMC MMCC MCCC

1 mark

11. Here is a number chart.

Every third number in the chart has a circle on it.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22			

The chart continues in the same way.

Here is another row in the chart.

Draw the missing circles.

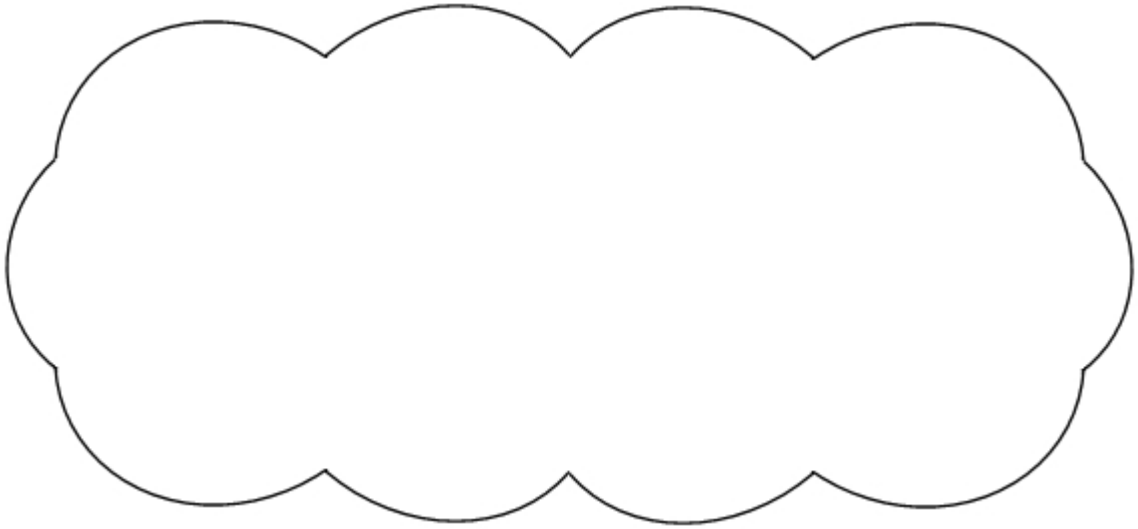
71	72	73	74	75

1 mark

Will the number **1003** have a circle on it?
Circle **Yes** or **No**.

Yes / No

Explain how you know.



1 mark

12. The rule to get each number in a sequence is

subtract the previous number from 100, then **divide** the answer by 2

Here is part of the sequence.

Write the two missing numbers.

	40	30	35	32.5	33.75	

2 marks

Mark schemes

1.

Award **TWO** marks for a correct answer of 275

OR

an answer in the range from 270 to 280 inclusive.

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, e.g.

- 150 + 175 = 325
  600 − 325 =

OR

- 600 − 150 − 165 *(error)* =

*Answer need not be obtained for the award of **ONE** mark.*

Accept a reading in the range 170 to 180 ml inclusive for the second jug.

*At least one of the measurements must be correct for the award of **ONE** mark.*

Up to 2m

[2]

2.

Award **TWO** marks for the correct answer of £0.90

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- £1.35 × 2 = £2.70
  £2.70 ÷ 3

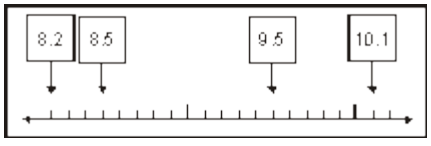
*Accept for **ONE** mark an answer of £90p **OR** £0.9 as evidence of an appropriate method.*

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

[2]

3.



(a) Writes **8.2** in the left-hand box.

1

(b) Writes **10.1** in the righthand box.

1

[2]

4. (a) 0.25

Do not *accept* $\frac{1}{4}$ *or any other fraction*

Refer to section 2.3 on page 10 for additional guidance on marking answers involving measures (see Resource).

1

(b) 65(p) **OR** (£)0.65

Refer to section 2.1 on pages 8 and 9 for additional guidance on marking answers involving money (see Resource).

1

[2]

5. Award **TWO** marks for all four letters in the correct order as shown:

99 *J*

29 **G**

–83 **A**

–15 **E**

44 **H**

If the answer is incorrect, award **ONE** mark for three letters correct.

Up to 2

[2]

6. Award **TWO** marks for the correct three numbers, as shown:

to the nearest 1,000	**8,000**
to the nearest 100	**7,500**
to the nearest 10	**7,550**

If the answer is incorrect, award **ONE** mark for **any two** of the numbers rounded correctly.

Do not *accept 500 or 50 for the second and third entries.*

Up to 2m

[2]

7. Third box only ticked correctly, as shown:

3 − 2 + 2	☐
4 − 2 + 1	☐
4 − 2 + 2	✓
3 − 2 + 1	☐

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

[1]

8. 2006

***Do not** accept 'two thousand and six' in words.*

[1]

9. 50

Accept –50

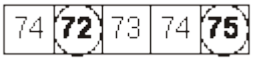
[1]

10. ~~MCMM~~

Accept other clear indication

[1]

11. Two numbers circled as shown:



1

An explanation which recognises that 1003 is not a multiple of 3, eg:

- 'Because 1003 is not divisible by 3'
- 'Because 1003 is not a multiple of 3'
- 'Because 1003 is not in the 3 times table'
- 'Because I divided 1003 by 3 and there was a remainder'
- 'Because 1003 + 3 has a decimal answer'
- 'Because 1 + 0 + 0 + 3 = 4, and 4 is not a multiple of 3'
- 'Because 1003 has a digital sum of 4'
- 'Because 1002 is the nearest in the 3 times table'
- 'Because 1000 is not divisible by 3'
- 'Because 999 is divisible by 3'.

Do not *award the mark if additional incorrect numbers are circled.*

Accept alternative unambiguous indications, eg ticks, crosses.

No mark is awarded for circling 'No' alone.

Do not *accept vague or arbitrary explanations, eg:*

- *'Because 1003 ends in 3'*
- *'Because 1003 is in the third column'*
- *'Because if you keep going in 3s you will go past it'.*

If 'Yes' is circled but a correct unambiguous explanation is given, then award the mark.

U1

[2]

12. 20

1

33.125

Accept equivalent fractions or decimals

1
U1

[2]