Scales and Measures with Answers

Name: _____

Class: _____

Date: _____

Time: **27 minutes**

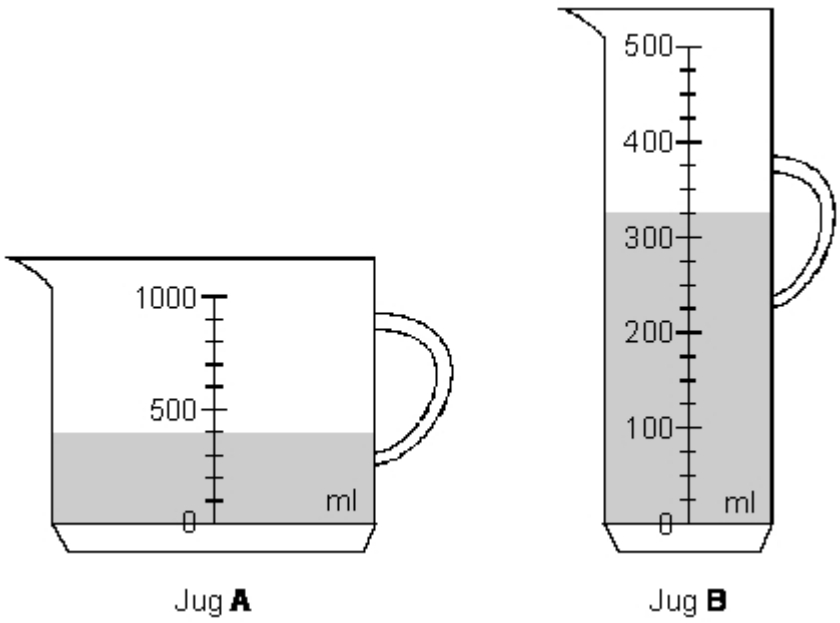
Marks: **27 marks**

Comments:

Q1.

Measuring jugs

The diagram shows the volume of water in two measuring jugs.



Which jug contains **more** water?

Tick (✔) A or B.

☐ A ☐ B

How much more does it contain?

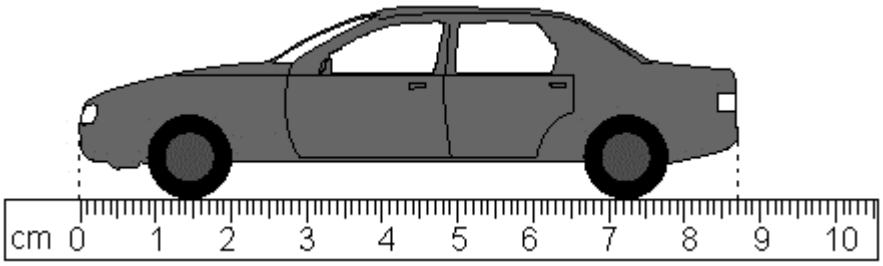
Show your method

ml

2 marks

Q2.

Here is a drawing of a model car.



What is the **length** of the model?

Give your answer in **centimetres**, correct to one decimal place.

cm

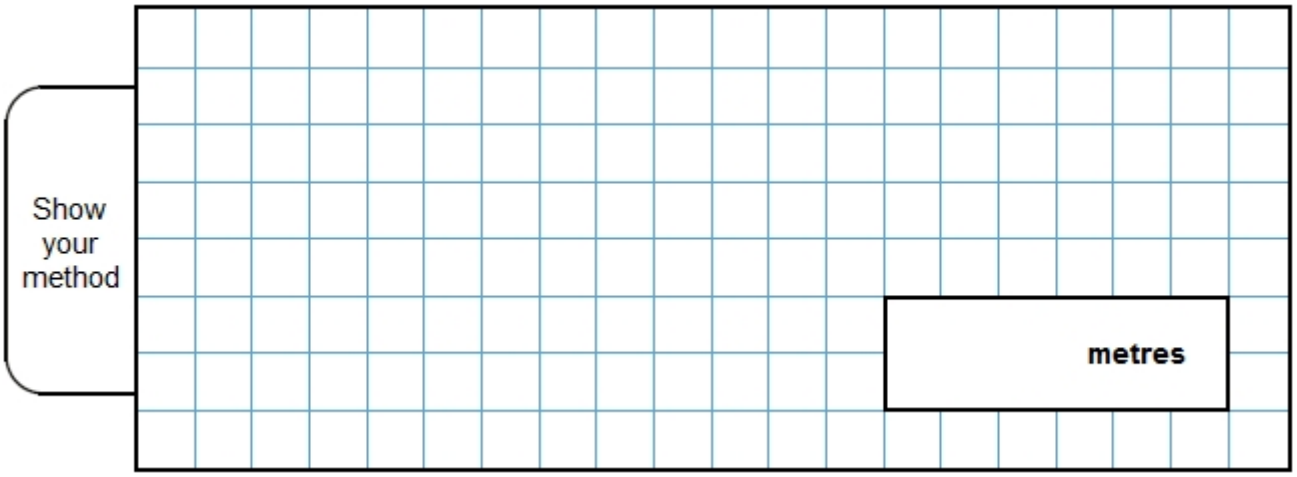
1 mark

The height of the model is **2.8 centimetres**.

The height of the real car is **50** times the height of the model.

What is the **height** of the **real car**?

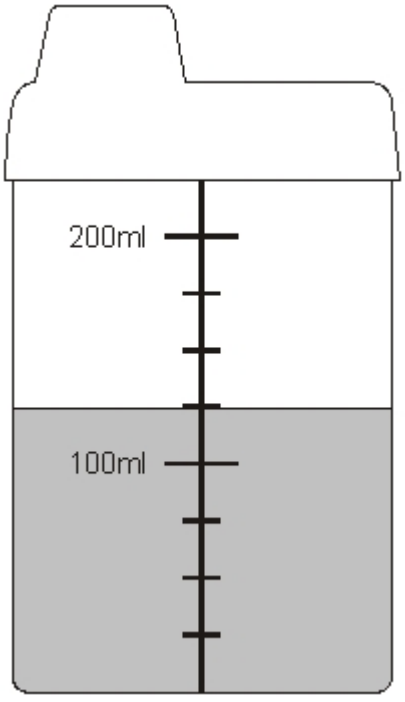
Give your answer in **metres**.



2 mark

Q3.

Here is a baby's drinking cup.



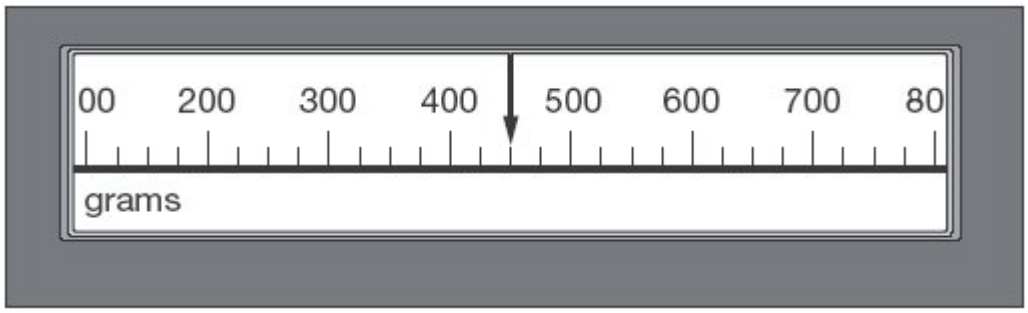
How many millilitres of water are in the cup?

ml

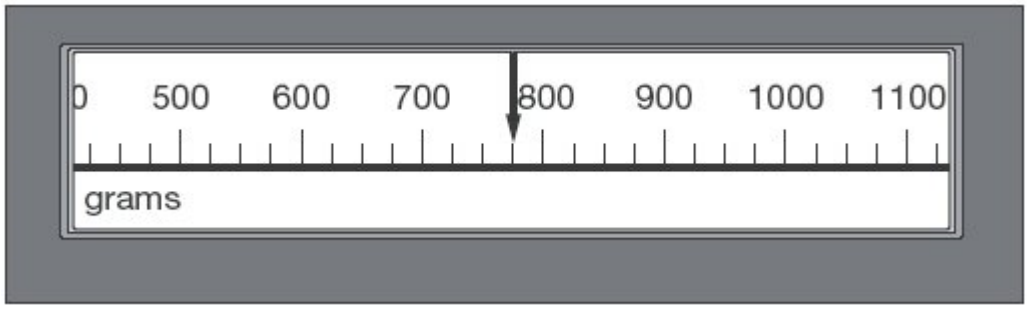
1 mark

Q4.

This scale shows the mass of Amy's kitten when it was one month old.



This scale shows the mass of the kitten when it was two months old.



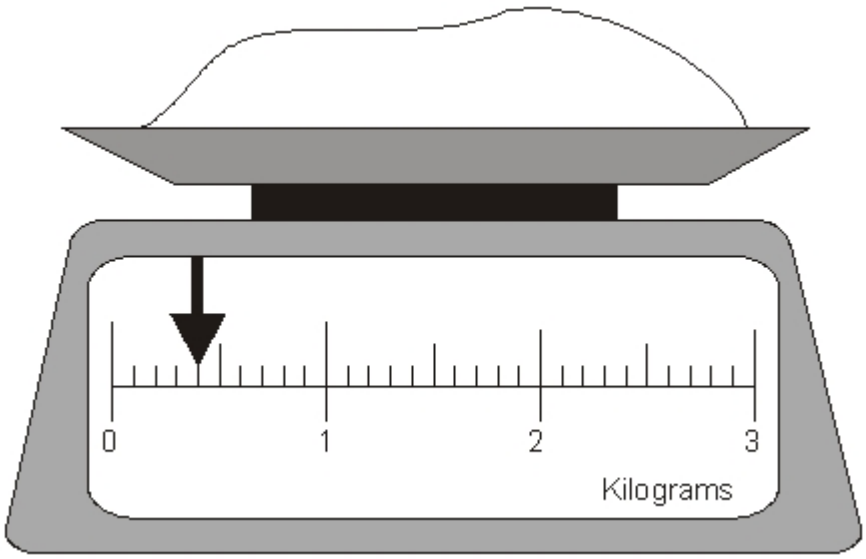
What is the increase in mass?

g

1 mark

Q5.

Here is some flour on a weighing scale.



How many **grams** of flour are on the scale?

g

1 mark

How much more flour must be added to the scale to make 1.6 kg?

1 mark

Q6.(a) 1 kilogram of grapes costs £5.80

Megan buys 700 grams of grapes.

How much does she pay?

£

1 mark

(b) 1 kilogram of cheese costs £13.50

Megan buys a piece of cheese costing £2.49

What is the mass of the cheese to the **nearest 100 grams**?

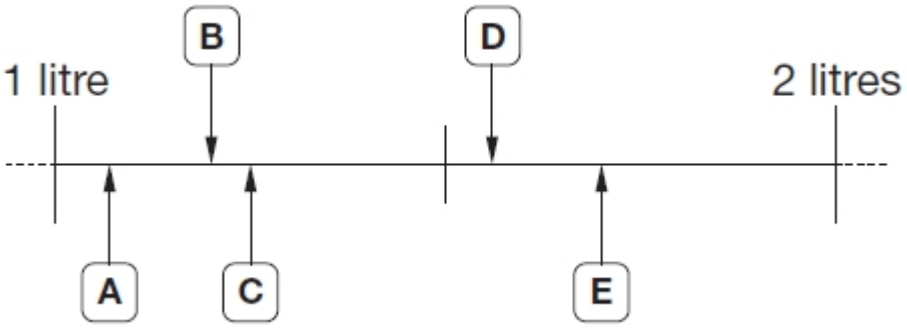
Show your method

g

2 marks

Q7.

Here are five letters on a scale.



Match each letter to one of the capacities in the list below.

1200 ml ☐

1.7 l ☐

$1\frac{1}{4}$ l ☐

1560 ml ☐

1.07 l ☐

2 marks

Q8.

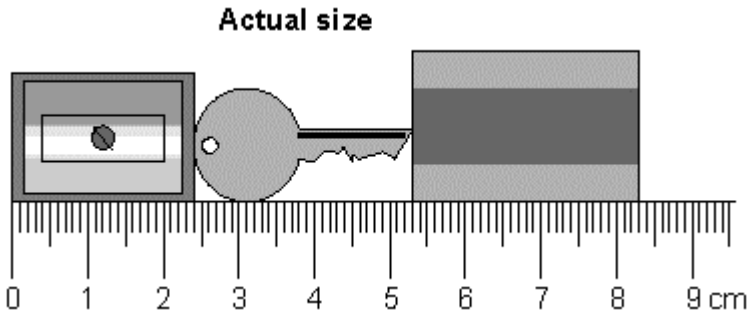
There are 60g of rice in **one** portion.

How many portions are there in a 3 kg bag of rice?

1 mark

Q9.

Here are a pencil sharpener, a key and a rubber.



What is the length of **all three things** together?

Give your answer in **millimetres.**

mm

1 mark

What is the length of the **key**?

Give your answer in **millimetres**.

mm

1 mark

Q10.

Katie's glass holds a **quarter of a litre** when it is full.

She nearly fills it to the top with juice.

Tick (✔) the approximate amount of juice she puts in the glass.

4 millilitres ☐

20 millilitres ☐

120 millilitres ☐

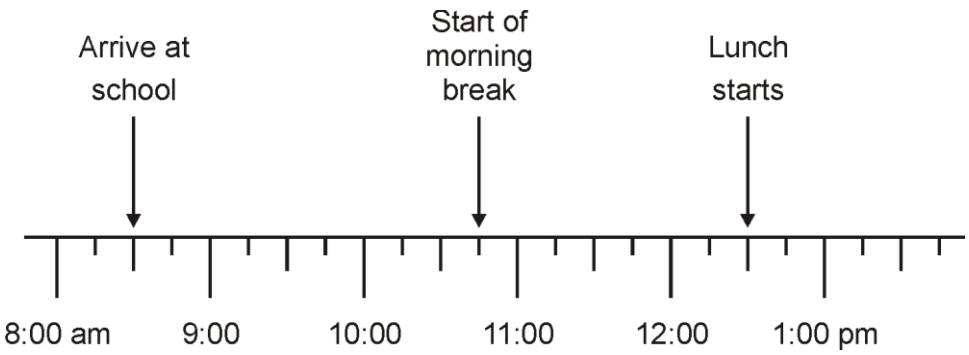
220 millilitres ☐

420 millilitres ☐

1 mark

Q11.

Jamie makes a time line of part of his day.



What time does Jamie's morning break start?

☐ am

1 mark

Lunch lasts for three-quarters of an hour.

What time does lunch **finish**?

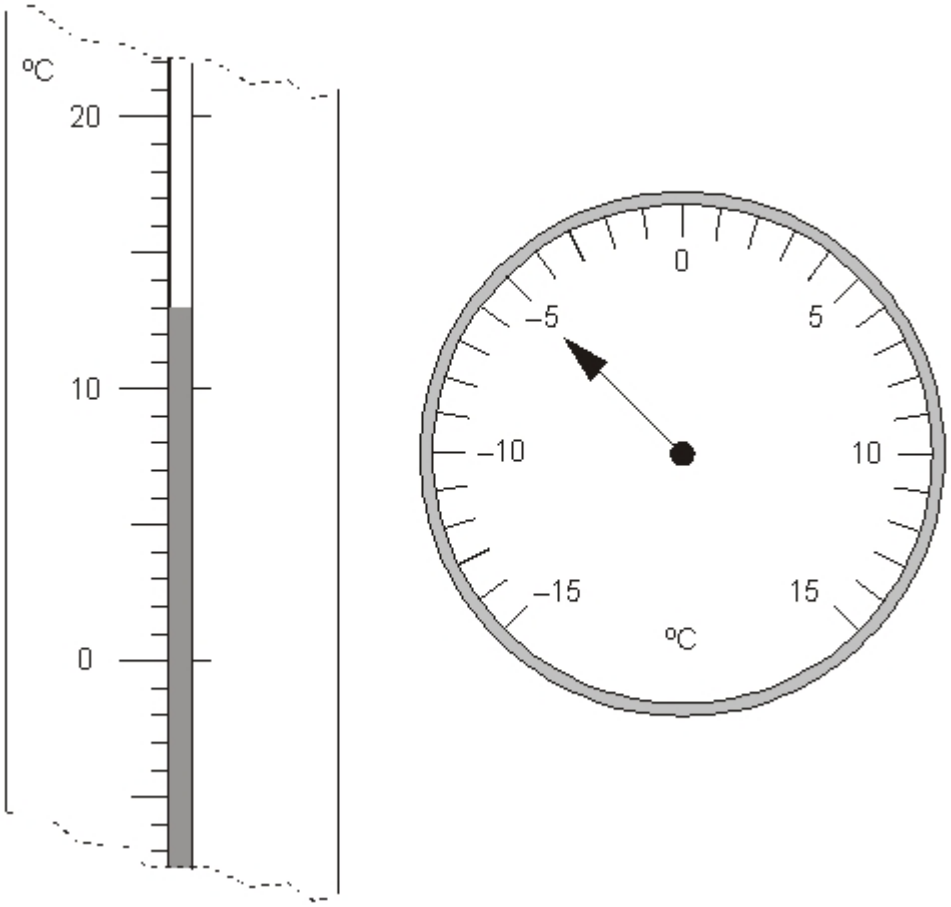
☐ pm

1 mark

Q12.

Here are two thermometers.

They show two different temperatures.



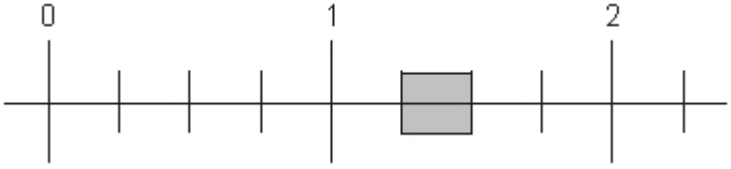
What is the **difference** between the two temperatures?

degrees

1 mark

Q13.

Part of this number line is shaded.



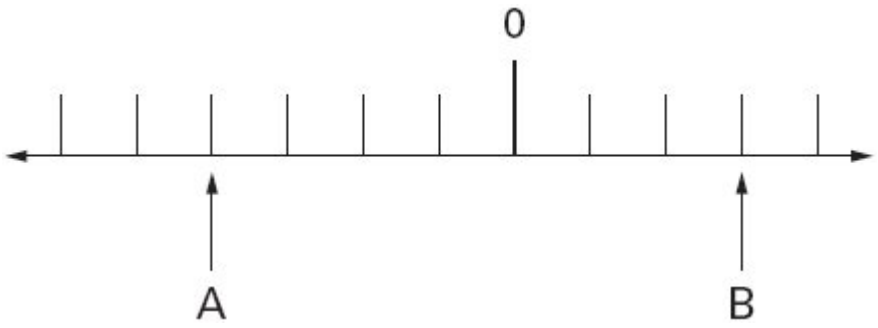
Circle **all** the numbers below that belong in the shaded part of the number line.

1.1 1.4 $1\frac{1}{3}$ $1\frac{1}{5}$

1 mark

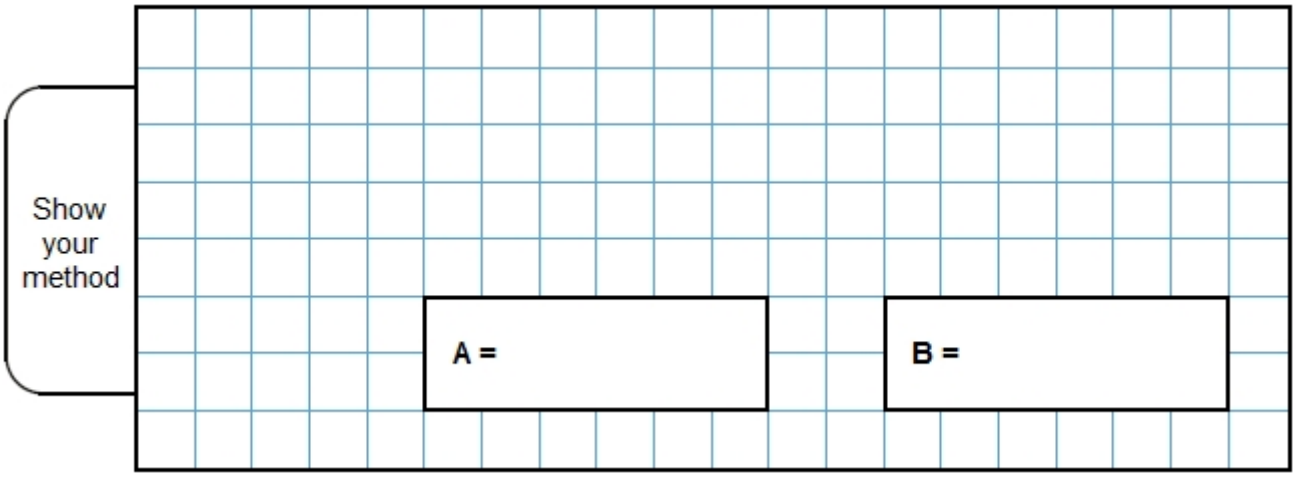
Q14.

A and **B** are two numbers on the number line below.



The **difference** between **A** and **B** is 140

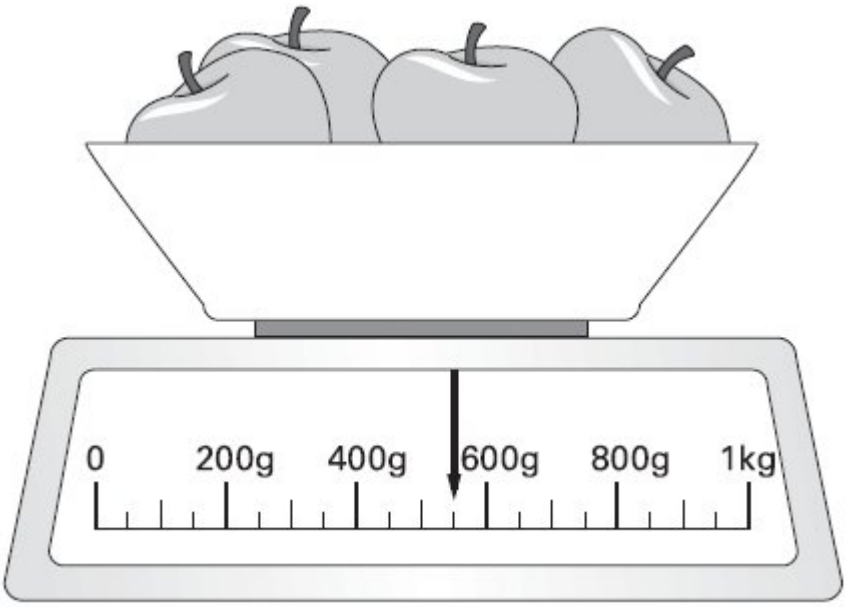
Write the values of **A** and **B**.



2 marks

Q15.

Here are some apples.



What is the total weight of these apples?

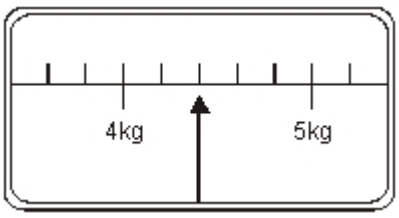
g

1 mark

Q16.

This scale shows the weight of Fred's cat.

Fred's cat



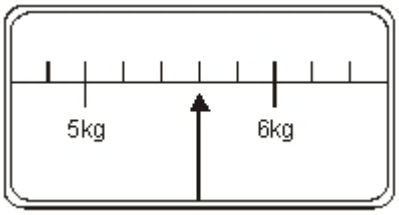
What is the weight of Fred's cat?

kg

1 mark

This scale shows the weight of Fred's dog

Fred’s dog



How much **more** does Fred's dog weigh than his cat?

kg

1 mark

M1.

Indicates A and gives the answer 75

2

or Shows or implies that jug A contains 400

or

Shows or implies that jug B contains 325

1

(U1)

[2]

M2. (a) 8.7 cm

Do not *accept 8 cm 7 mm* ***OR*** *87 mm*

1

(b) Award **TWO** marks for the correct answer of 1.40 m **OR** 1.4.

Accept for ***TWO*** *marks 1 m 40 cm*

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

50 × 2.8 ÷ 100

Calculation need not be performed for the award of the mark.

Award ***ONE*** *mark for 14* ***OR*** *140* ***OR*** *1400,* ***OR*** *50 × 2.8*

up to 2

[3]

M3. 125

[1]

M4. 325

[1]

M5. (a) 400

Answer must be in grams.

1

(b) 1200 g **OR** 1.2 kg

OR

for finding the correct difference between 1.6 kg and the answer given for (a).

*Accept 1200 **OR** 1.2 **OR** 1 kg 200 g*

1

[2]

M6.(a) £4.06

! Money

See guidance

1

(b) 200

! Measures

See guidance

2

or

Gives an answer of 180 or 184 or 184.4(…)

OR

Shows or implies a complete correct method, eg:

- 1000 × 2.49 ÷ 13.50
- £13.50 ÷ £2.49 = 5.42

  1000 ÷ 5.42
- 1350 ÷ 1000 = 1.35

  249 ÷ 1.35
- £1.35 = 100

  £2.70 = 200

! Inconsistent units

Within an otherwise correct method, condone

eg, for 1 mark accept:

- *(£)13.50 ÷ 1000 = 1.35(p)*
  (£)2.49 ÷ 1.35(p)
- *(£)13.50 ÷ 1000 = (£)0.0135*
  249(p) ÷ (£)0.0135

1

[3]

M7. Award **TWO** marks for all five letters in the correct order as shown:

B

E

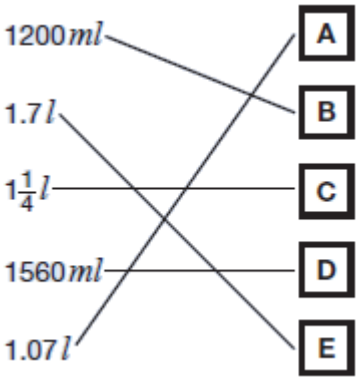
C

D

A

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

Accept alternative unambiguous indications, eg



Up to 2

[2]

M8. 50 (portions)

[1]

M9. (a) 83 mm **OR** 8 cm 3 mm

Do not *accept 8.3 mm*

1

(b) 29 mm **OR** 2 cm 9 mm

Do not *accept 2.9 mm*

1

[2]

M10. Box ticked as shown:

4 millilitres ☐

20 millilitres ☐

120 millilitres ☐

220 millilitres ☑

420 millilitres ☐

Accept any other clear way of indicating the approximate amount, such as a cross.

[1]

M11. (a) 10:45am

The answer is a specific time (see General guidance: responses involving time for guidance).

1

(b) 1:15pm

The answer is a specific time (see General guidance: responses involving time for guidance).

1

[2]

M12. 18

Accept –18

[1]

M13. Two numbers circled as shown:

1.1 (1.4) ($1\frac{1}{3}$) $1\frac{1}{5}$

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

Accept: alternative unambiguous indications, eg numbers ticked, crossed or underlined.

[1]

M14. Award **TWO** marks for the correct answer as shown:

A = **–80** B = **60**

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

140 ÷ 7 = 20

Accept 'minus 80'
***Do not** accept '80–'*
*Answer need not be obtained for the award of **ONE** mark.*
*Accept for **ONE** mark:*
*A = –80 **AND** B = wrong answer **OR***
*A = –80 **AND** B = blank **OR***
*A = 80 **AND** B = 60 **OR***
*A = 80 **AND** B = –60 **OR***
*A = 60 **AND** B = –80*

Up to 2 (U1)

[2]

M15. 550

Accept 0.5 kg.

[1]

M16. (a) 4.4

1

(b) 1.2

OR

for finding the correct difference between 5.6 and the answer given for 15a **1**

[2]