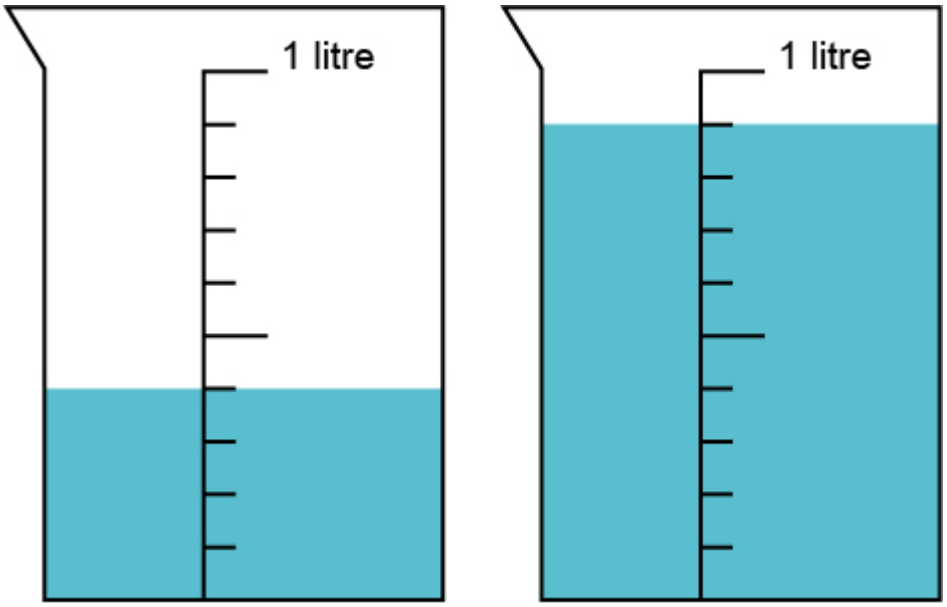
1.



What is the total volume of liquid in these measuring beakers, in litres?

litres

1 mark

2.

Stan bought **15 litres** of paint.

He used $\frac{2}{3}$ of it decorating his house.

How much paint has he used?

litres

1 mark

3. A bottle contains **0.7** litres of fruit drink.

Maria needs **5 litres** of drink for a party.

How many bottles does she need to buy?

1 mark

4. Put these volumes in order from smallest to largest.

0.75 litres 1.1 litres 0.3 litres $\frac{1}{5}$ litre 900ml $1\frac{1}{2}$ litres

smallest

1 mark

5. **0.25m** of ribbon costs **£1**.

How much does **2m** of ribbon cost?

£

1 mark

6. I have a **2 litre** carton of orange juice.

A glass holds **0.25 litres**.

How many glasses can I fill from one carton?

1 mark

7. Mrs Jasper is juicing oranges.

Each orange makes about **0.1 litres** of juice.

Mrs Jasper juices **22** oranges.

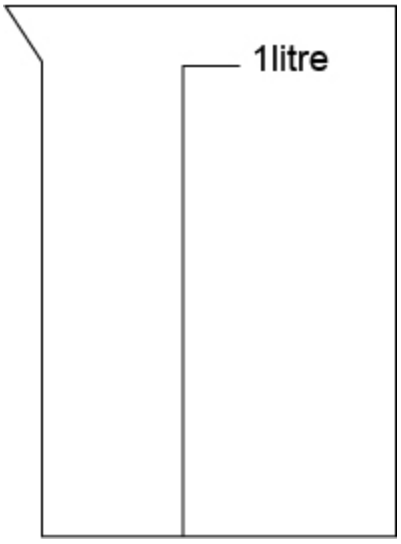
Approximately how many litres of orange juice will she get?

litres

1 mark

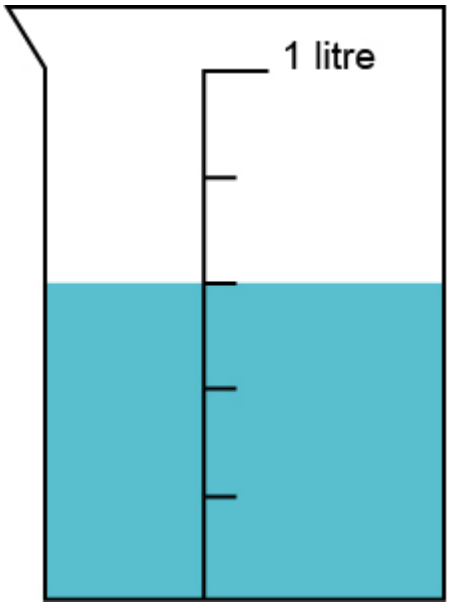
8. Estimate the position of **0.7 litres**.

Mark this on this beaker.



1 mark

9. Here is a **1 litre** beaker with some liquid in.



How much more liquid, **in litres**, do I need to add to the beaker to make 1 litre?

litres

1 mark

10. I have **700ml** of orange juice.

I mix it with **600ml** of lemonade.

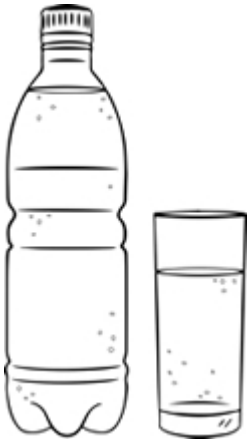
What volume of fruit drink have I made in total?

ml

1 mark

11. My cup contains **100 ml** of fizzy drink.

The bottle contains **10 times as much**.



How many **millilitres** are there in the bottle?

ml

1 mark

12. Ella's dad washes some cars.

He uses **12** buckets of water.

Each bucket has **5 litres** of water.

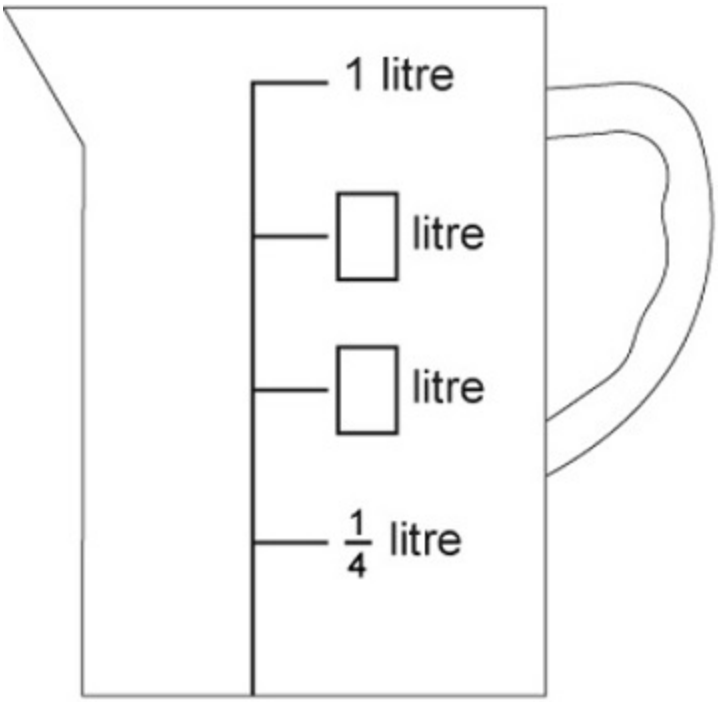
How many litres of water does he use **altogether**?

Show your method

litres

2 marks

13. Add the missing labels to the measuring jug.



1 mark

14. The school caretaker buys **50 litres** of paint.

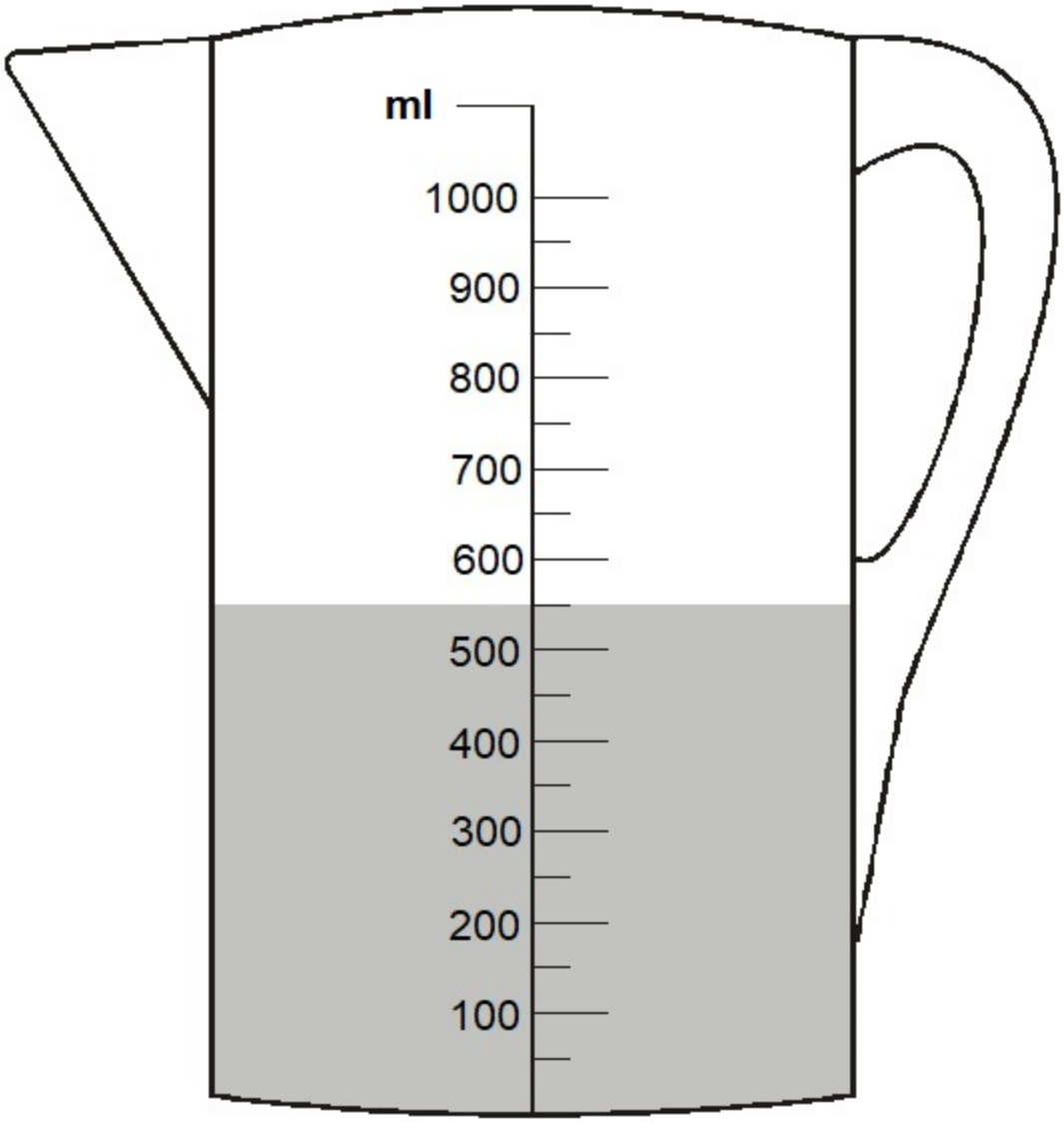
She uses $\frac{1}{5}$ of it to paint the year 3 classroom.

How many litres of paint is this?

litres

1 mark

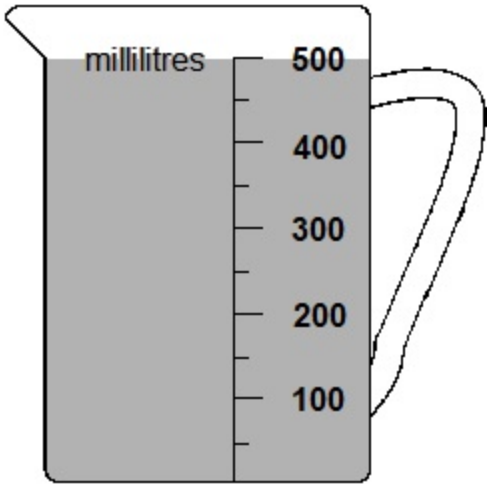
15. How many millilitres (ml) of water are in the jug?



millilitres

1 mark

16. This jug has water in it.



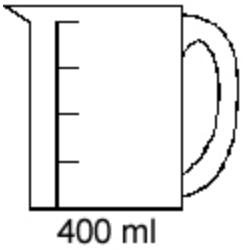
Ravi pours **150 millilitres** of water out of this jug.

How much water will be left in the jug?

millilitres

1 mark

17. **Filling up**



I need exactly **1 litre** of water.

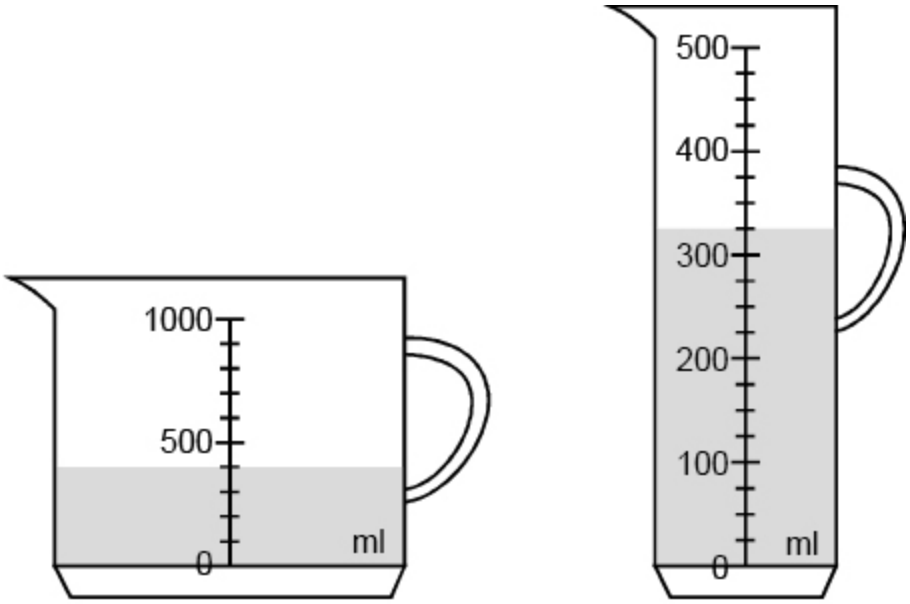
I have a measuring jug that holds **400 ml** when it is full.

Explain how I can use my measuring jug to obtain 1 litre of water.

1 mark

18. **Measuring jugs**

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



Jug **A** Jug **B**

Which jug contains **more** water?

Tick (✓) **A** or **B**.

A ☐ **B** ☐

How much more does it contain?

Show your method

ml

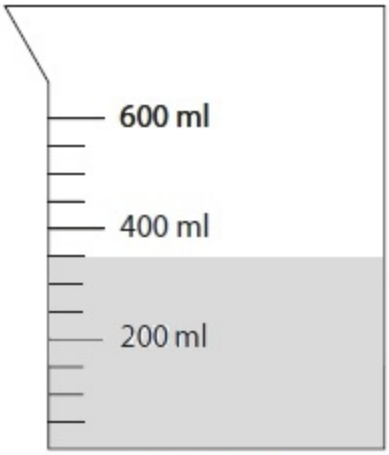
2 marks

19. A teaspoon is **5 ml**.

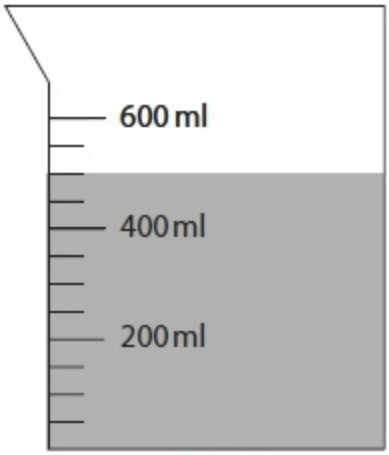
How many spoonfuls can you get from this jar?

1 mark

20. One jug contains lemonade and the other jug contains cola.



Lemonade



Cola

How much **more** cola is there than lemonade?

ml

1 mark

21.

small bottle of water

500 ml

large bottle

$2\frac{1}{2}$ litres

How many small bottles of water will fill the large bottle?

small bottles

1 mark

22. About how much water could the kettle hold?

Circle the correct amount.

2 litres 5 litres 10 litres

20 litres 50 litres

1 mark

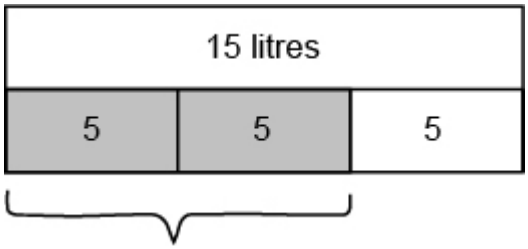
Mark schemes

1. 1.3 litres

[1]

2. 10 litres

Bar model might be helpful here.



[1]

3. 8

[1]

4. Award **ONE** mark for correct order, as shown:

1/5 litre	0.3 litres	0.75 litres	900 ml	1.1 litres	1.5 litres
(0.2 litres)			*(0.9 litres)*		
Smallest					**Largest**

*All capacities must be in the correct order for the award of **ONE** mark.*

Accept responses that include converted units (as shown underneath).

[1]

5. £8

[1]

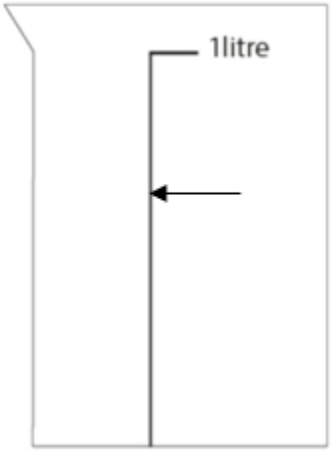
6. 8

[1]

7. 2.2 litres

[1]

8. Arrow to show 0.7 litres, as shown:



Arrow should be closer to 0.75 litres than 0.5 litres for award of the mark. Accept 0.6 – 0.8 L inclusive.

[1]

9. 0.4 litres

Also accept $\frac{4}{10}$ *litre.*

*Do **NOT** accept equivalent number of millilitres.*

[1]

10. 1,300 ml

[1]

11. 1,000 ml

[1]

12. 60 (litres)

*Award both marks for the correct answer by entering **1** in each mark box.*
A child with a correct answer can be awarded two marks even if they have failed to record a correct method or any method at all, since it can be assumed that they used a correct mental method to reach their answer.

U1

[2]

OR

This mark may be awarded for children who have the **wrong answer** but **a complete and correct method** that is communicated clearly.

Use the acceptable and unacceptable responses given below to help make your decision.

*If mark awarded, enter **1** then **0** in the mark boxes.*

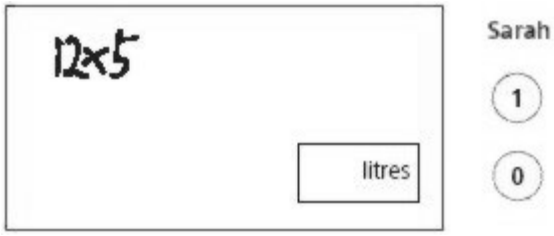
One mark may be awarded to children who have failed to record the correct answer, provided they have demonstrated a complete and correct method for identifying 12 lots of five. (This method might be numerals, signs, words or diagrams or any mixture of these.)

Examples of responses

Children are not required to give an answer to their calculation, provided they describe a complete and correct method. Sarah has not given an answer for her calculation. However, she can be awarded the mark since she described a complete and correct method. Jenny also described a correct method. However, her method is not complete since she has not recorded which part of the five times table she used. Jenny cannot be awarded any marks.

Sarah

1 mark



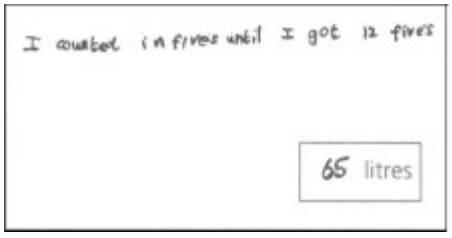
Jenny

0 marks

Children who give a written description of what they do must describe a complete and correct method. Bradley has described a complete and correct method. He has made an error in his calculation of 12 fives. However, he can be awarded the mark since his method is complete and correct. However, Roza's method is not complete since she has not demonstrated that she intended to count on 12 lots of five. Therefore Roza cannot be awarded the mark.

Bradley

1 mark



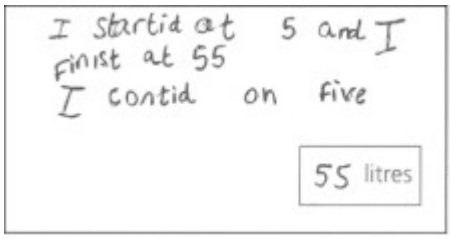
Bradley

1

0

Roza

0 marks



Roza

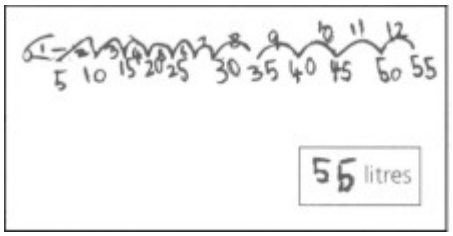
0

0

Children must record a correct method for the award of the mark. Hannah and Arun have both used number lines to help them answer the question; this is an efficient method. Hannah's number line starts at 0 and includes 12 jumps of five. She made one error in recording her 12 jumps. However, she used a correct method and can therefore be awarded one mark. Arun's number line also includes 12 jumps of five. However, Arun has not realised that his number line should start at 0. Therefore Arun's method is incorrect and cannot be awarded a mark.

Hannah

1 mark



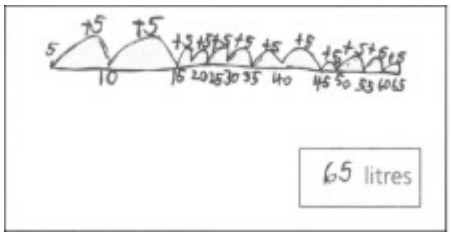
Hannah

1

0

Arun

0 marks



Arun

0

0

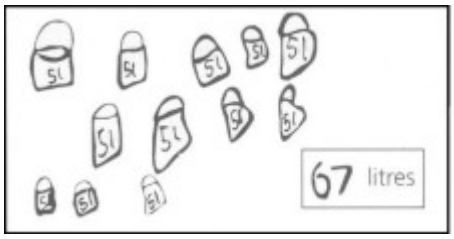
Children who use a counting method must record a complete method and display evidence of interpreting it correctly.

Chi has drawn 12 buckets, each labelled with five litres. However, he made an error when adding the fives to reach an answer of 67. Chi can be awarded a mark since he displayed the intention to count 12 lots of five; a complete and correct method.

Omar has also drawn 12 buckets. However, his answer of 15 does not suggest that he has attempted to treat each bucket as representing a five. Therefore his method is not complete and cannot be awarded a mark.

Chi

1 mark



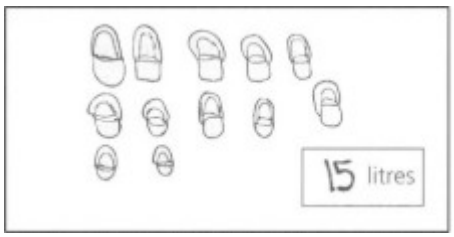
Chi

1

0

Omah

0 marks



Omar

0

0

Children must record a complete and correct method. Louise has drawn 12 buckets, she has then counted up in fives to match the buckets. However, she has missed one number out. Despite this error her method is complete and correct so she can be awarded the mark. Kishan has attempted to use a multiplication method involving partitioning. However, he has not partitioned correctly. Kishan cannot be awarded the mark since his method is incorrect.

Louise

1 mark

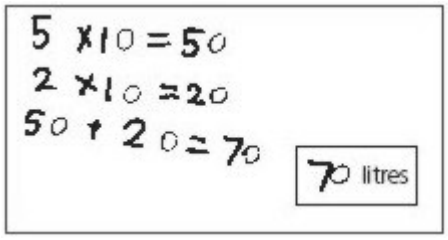
Louise

1

0

Kishan

0 marks



Kishan

0

0

Children must record a complete and correct method for the award of the mark.

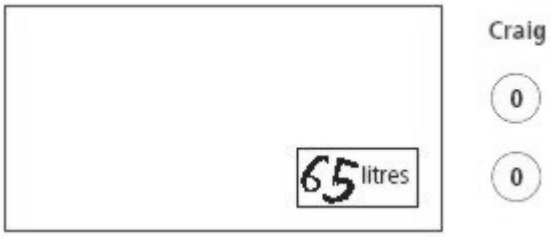
Kirski has drawn five groups of 12. She has made an error in counting to reach an incorrect total. However, she can be awarded the mark since her method is both complete and correct. Craig has recorded a value that is close to the correct answer of 60. However, since he has not recorded his method we cannot assume that his method was complete or correct. Therefore Craig cannot be awarded any marks.

Kirski

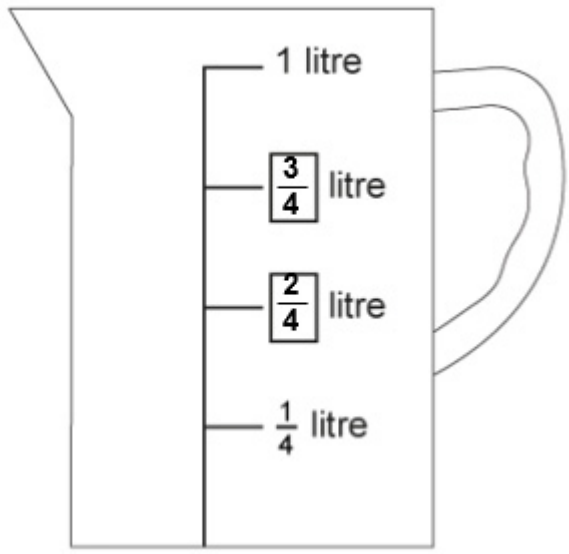
1 mark

Craig

0 marks



13.



Accept ½ litre as well as 2/4 litre.

[1]

14. 10 litres

[1]

15. 550 (millilitres)

[1]

16. 350 (millilitres)

[1]

17. Award **ONE** mark for a correct explanation that 2 jugs are needed, eg

- 1000 ÷ 400 = 2.5
- Fill it 2 times then another half
- 2 complete ones then fill it to 200 ml
- 400 + 400 + 200
- 3 jugs of 400, then pour 200 back

Do not *accept vague or incomplete explanations, eg*

- *2 jugs then a bit more*
- *A bit less than 3 jugs*
- *2 jugs then (any value less than 400 ml)*

Do not *accept explanations which include incorrect mathematics or incorrect information that is relevant to the explanation, eg*

- *2 × 400 = 900 (error), then put in another 100*

[1]

18. 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]

19. 65 (spoonfuls)

[1]

20. 150 (ml)

[1]

21. 5 (small bottles)

[1]

22. One answer circled as shown:

Accept any other clear way of indicating the correct answer, such as ticking or underlining.

U1

[1]