

Multiplication

TB Y6 GD

Name: _____

Class: _____

Date: _____

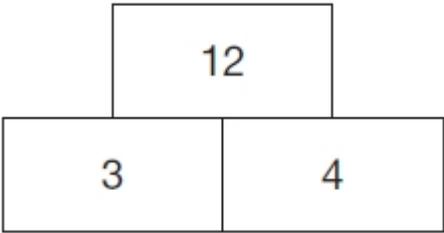
Time: **89 minutes**

Marks: **90 marks**

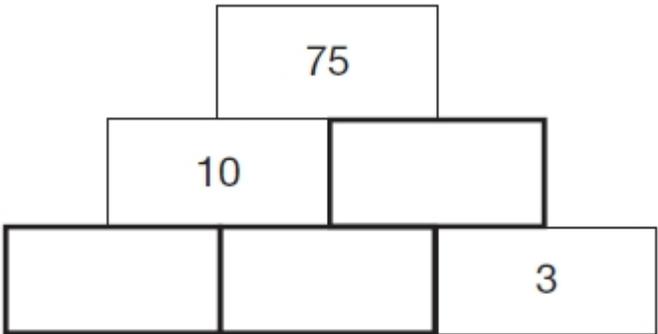
Comments:

1

In this tower, two numbers are **multiplied** to give the number above.



Write the missing numbers in the tower below to make it correct.



2 marks

2

Calculate 560×28



Show your method

A large grid for showing the method of calculation. A small empty box is located at the bottom right of the grid.

2 marks

4 A 5p coin has a diameter of 1.8 centimetres.



Holly makes a straight line of 5p coins worth £10



How long is Holly's line?
Give your answer in **metres**.

Show your method

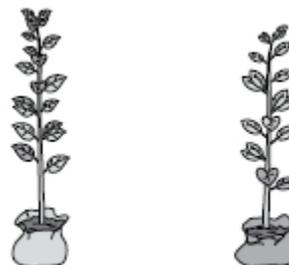
A large grid is provided for showing the method. A small box labeled 'm' is located at the bottom right of the grid.

2 marks

5 A farmer has £1200 to buy apple trees and pear trees.

Apple trees cost £24.75 each.

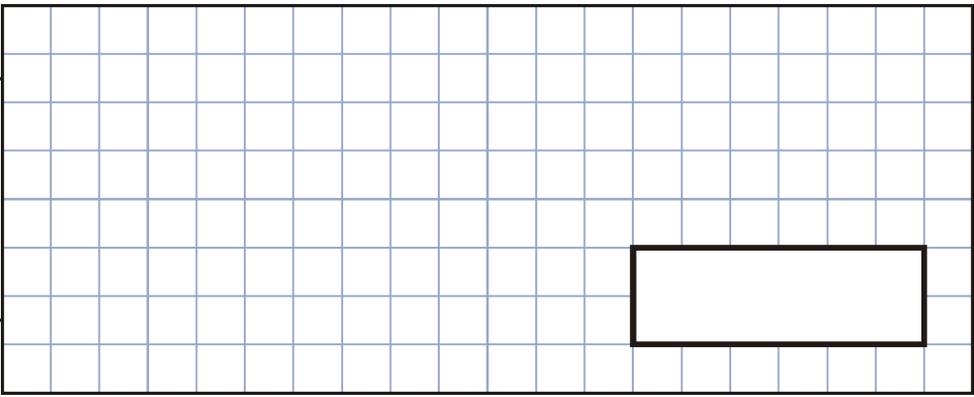
Pear trees cost £12.50 each.



He buys 35 apple trees.

10 Calculate 143×37

Show your method



2 marks

11 Calculate 31.6×7

جوابك



1 mark

12

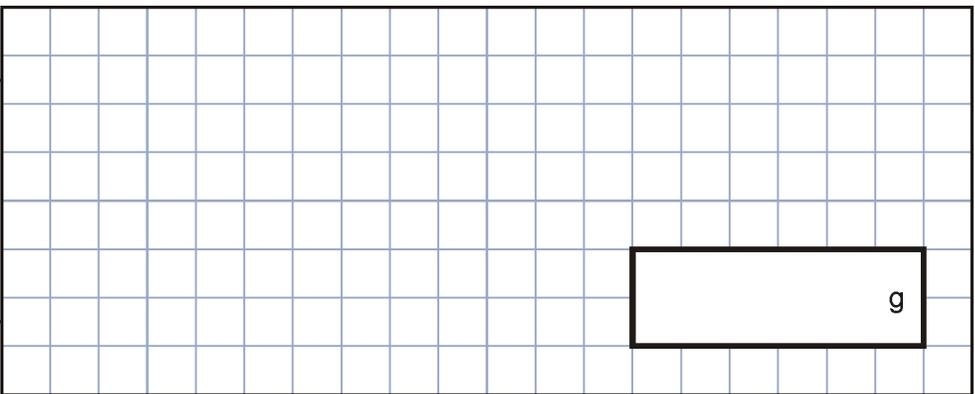


Every **100g** of brown bread contains **6g** of fibre.

A loaf of bread weighs 800g and has 20 equal slices.

How much fibre is there in **one** slice?

Show your method



2 marks

13

Calculate $\frac{3}{8}$ of **980**



1 mark

14



100 adults and **80** children pay to go in.

How much money do they pay altogether?



Show your **working**.
You may get a mark.

£

2 marks

15

Write in the **two** missing digits.

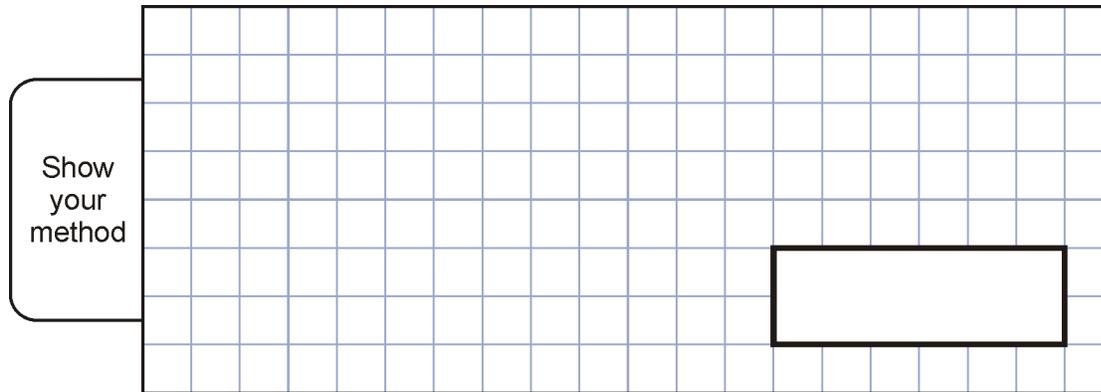


$$\boxed{} \boxed{0} \times \boxed{} \boxed{0} = \boxed{3} \boxed{0} \boxed{0} \boxed{0}$$

1 mark

16 Calculate 509×24

Show your method



2 marks

17 Write the **three prime numbers** which multiply to make **231**

$\square \times \square \times \square = 231$

1 mark

18 Circle two different numbers which **multiply** together to make **1 million**.

10 100 1000 10 000 100 000

1 mark

19 Leila knows that

$$65 \times 3 = 195$$

Explain how she can **use this information** to find the answer to this multiplication:

$$165 \times 3$$

.....

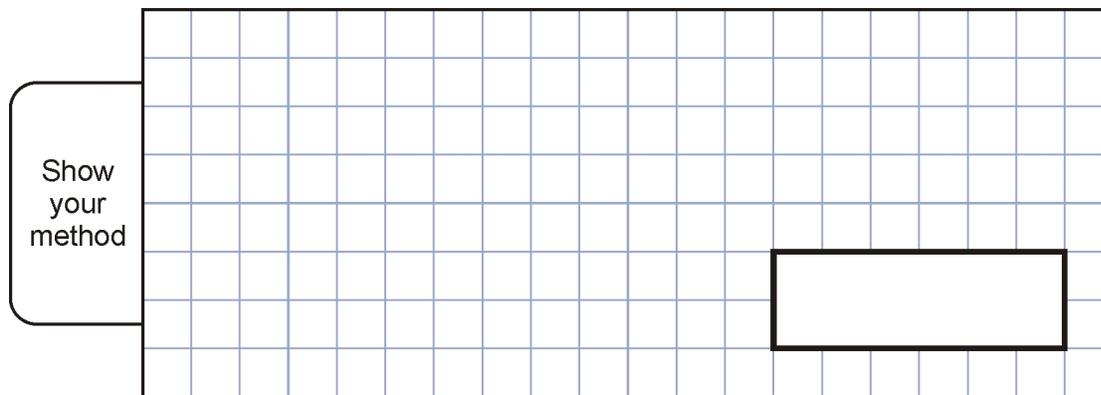
.....

.....

1 mark

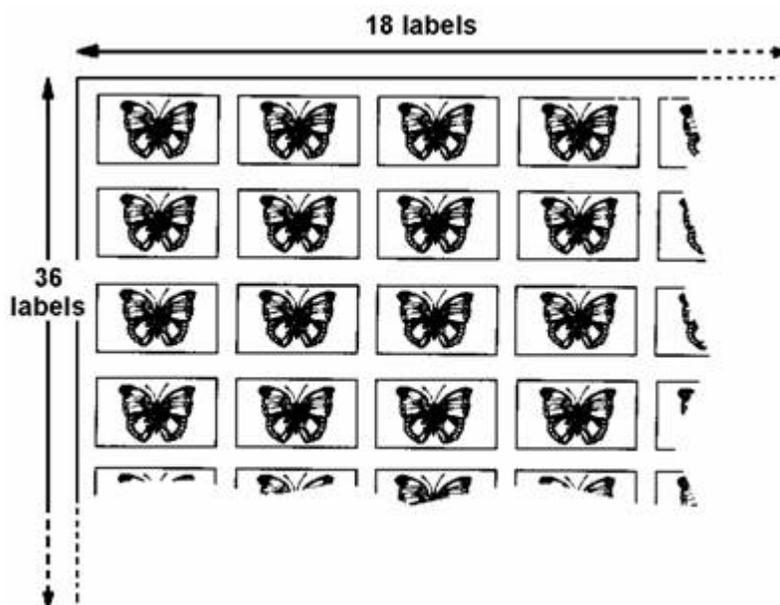
20 Calculate 268×53

Show your method



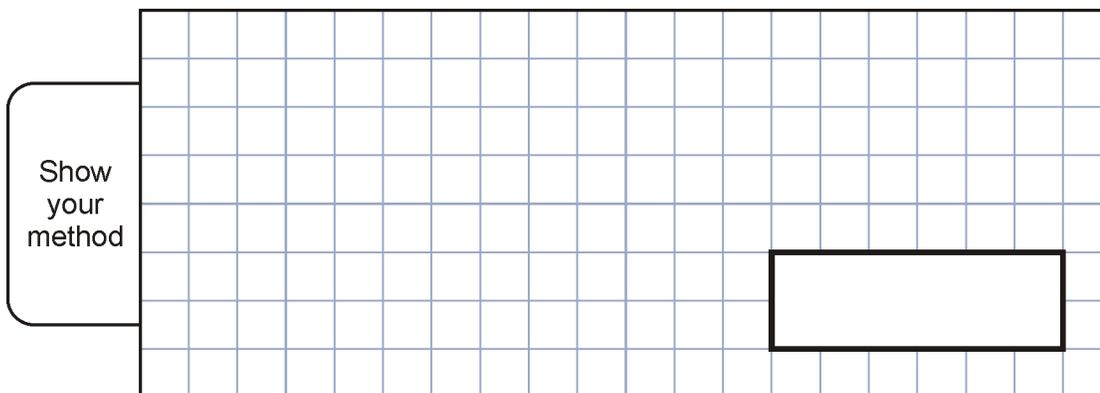
2 marks

21 A shop sells sheets of sticky labels.
On each sheet there are **36 rows** and **18 columns** of labels.



How many labels are there altogether on **45 sheets**?

Show your method



2 marks

25

Kim knows that

$$137 \times 28 = 3836$$

Explain how she can use this information to work out this multiplication.

$$138 \times 28$$

.....

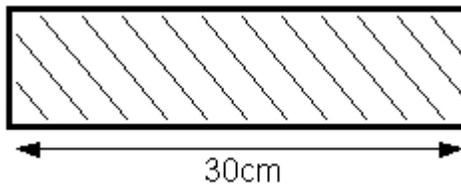
.....

.....

1 mark

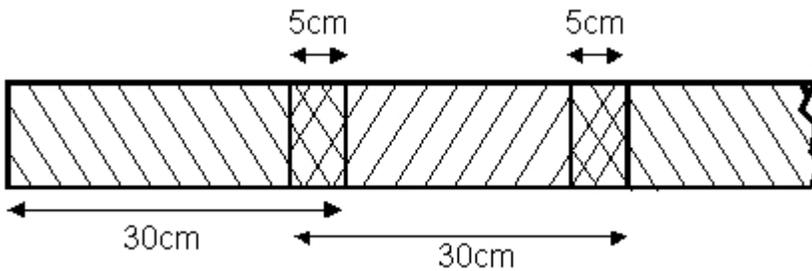
26

Strips of paper are each **30 centimetres** long.



Steve joins strips of paper together to make a **streamer**.

The strips overlap each other by **5cm**.



How long is a streamer made from **only 2 strips**?

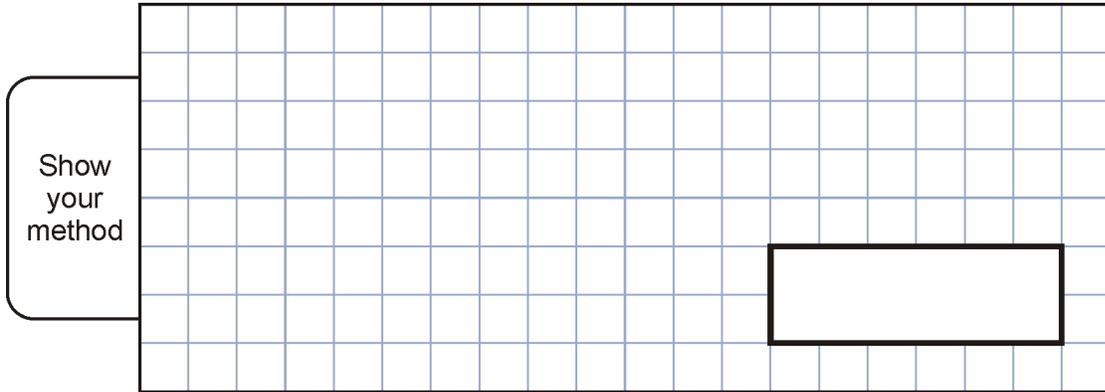
.....

cm

1 mark

Sunita makes a streamer that is **280cm** long.

How many **strips** does she use?



2 marks

27

Write the **three missing** digits.



$$\square \square \times \square = 371$$

1 mark

28

This three-digit number has **2** and **7** as **factors**.

2 9 4

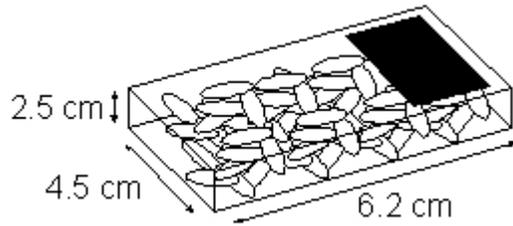
Write another **three-digit** number which has **2** and **7** as **factors**.

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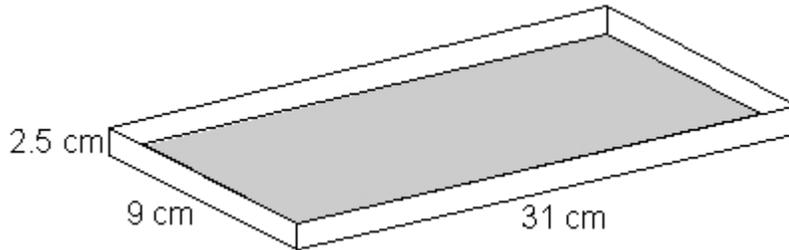
1 mark

29

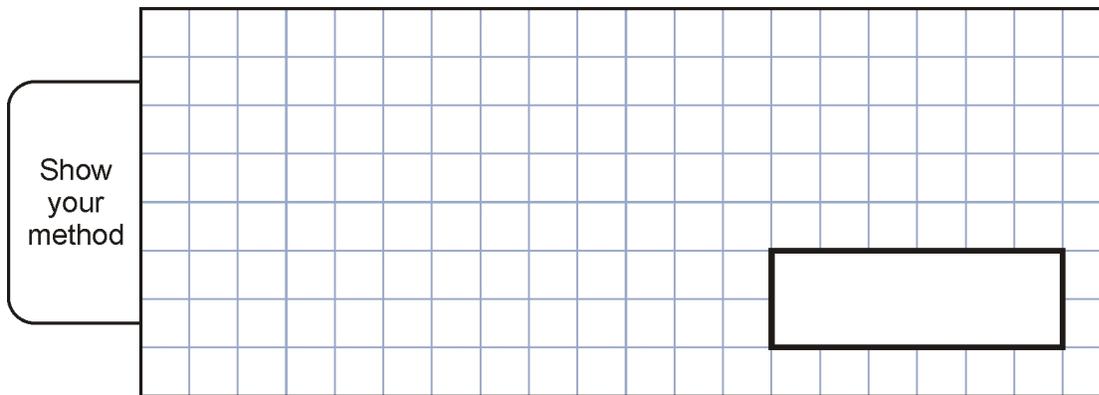
Boxes measure 2.5cm by 4.5cm by 6.2cm.



The shopkeeper puts them in a tray.



Work out the **largest** number of boxes which can lie flat in the tray.



2 marks

30

Write in the missing digit.



$$\square 92 \div 14 = 28$$

1 mark

31

Write in the missing digits.



$$323 \times \square 7 = 1518 \square$$

1 mark

32

427 children visit a castle.
They go in groups of 15. One group has less than 15.
Every group of children has **one** adult with them.

How many **adults** will need to go?

Handwritten mark →

1 mark

Mr Todd buys **7 drinks** at **48p** each and **8 drinks** at **52p** each.

What is the **total** cost of the 15 drinks?

You **must** show your working.

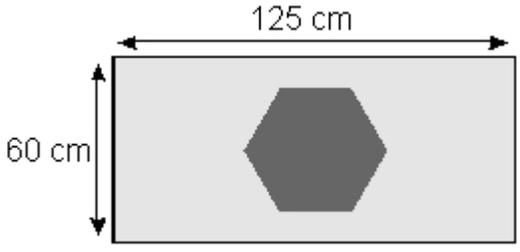
Show your method

£

2 marks

33

Here is a flag.



What is the **area** of **this flag**?

Show your method

cm²

2 marks

20% of the flag is blue.

What **area** of the flag is **blue**?

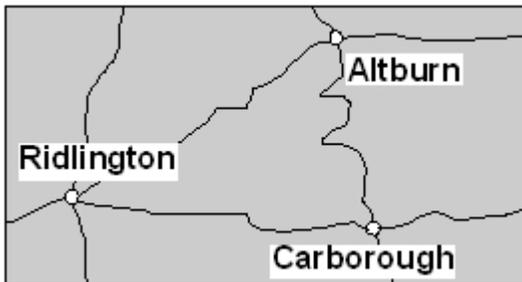
Show your method

cm²

2 marks

34

This map has a scale of **1 centimetre to 6 kilometres**.



The road from Ridlington to Carborough measured **on the map** is **6.6cm** long.

What is the length of the road in **kilometres**?

Show your method

km

2 marks

35

$63.6 \times 7 =$

1 mark

36

$$\frac{1}{3} \times \frac{1}{2} =$$

1 mark

37

$$34.8 \times 1000 =$$

1 mark

38

$$0.7 \times 5 =$$

1 mark

39

$$\frac{1}{8} \times \frac{1}{2} =$$

1 mark

40

$$0.8 \times 4 =$$

1 mark

41

$$1\frac{1}{4} \times 4 =$$

1 mark

42

$$\frac{1}{6} \times \frac{1}{2} =$$

1 mark

43

$$\frac{5}{6} \times 24 =$$

1 mark

44

$$\frac{1}{4} \times \frac{1}{2} =$$

1 mark

45

$$\begin{array}{r} 2825 \\ \times 26 \\ \hline \end{array}$$

2 or 1 marks

46

$$1\frac{1}{3} \times 2 =$$

1 mark

47

$$\frac{1}{5} \times \frac{1}{3} =$$

1 mark

48

$$9.78 \times 1000 =$$

1 mark

49

$$\frac{5}{8} \times 40 =$$

1 mark

50

$$\begin{array}{r} 1802 \\ \times 43 \\ \hline \end{array}$$

2 or 1 marks

51

$$\frac{2}{5} \times 20 =$$

1 mark

52

Two numbers have a **difference of 1**.

They multiply together to make 9.

Megan makes this spreadsheet to help find what the two numbers might be.

first number	second number	multiply
2	3	6
2.1	3.1	6.51
2.2	3.2	7.04
2.3	3.3	7.59
2.4	3.4	8.16
2.5	3.5	8.75
2.6	3.6	9.36

Megan says,

'From my spreadsheet, the best estimate for the two numbers is 2.5 and 3.5'

Chen says,

'I can work out a better estimate for the two numbers.'

Write what Chen's estimate could be.



and

2 marks

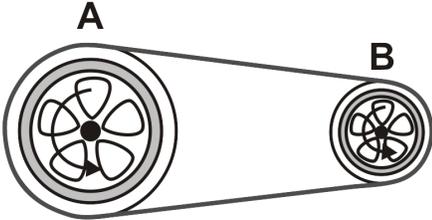
53

$$2\frac{3}{4} \times 3 =$$

1 mark

54

A and B are two chain wheels on a bike.



For every **2 complete turns** that wheel A makes, wheel B makes **5 complete turns**.

If wheel A makes **150 turns**, how many turns will wheel B make?

Show method →

1 mark

If wheel B makes **90 turns**, how many turns will wheel A make?

Show method →

1 mark

55

A recipe for fruit squash is

<i>oranges (chopped)</i>	<i>300 g</i>
<i>lemonade</i>	<i>1500 ml</i>
<i>orange juice</i>	<i>750 ml</i>
<i>makes enough for 6 people</i>	

Trina wants to make enough squash for **10 people**.

How many millilitres of **lemonade** will she need?

Show your method

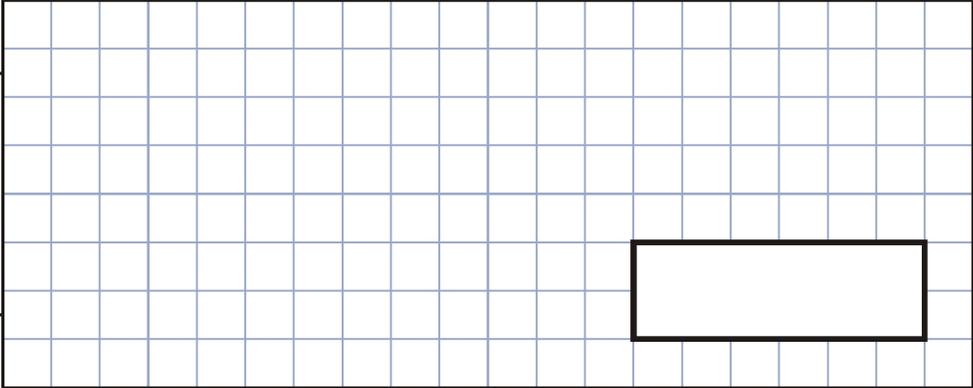
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2 marks

Brian is using **2 litres of orange juice** and follows the same recipe.

How many people is this enough for?

Show your method



2 marks

56

$$\frac{1}{4} \times \frac{3}{7} =$$



1 mark

57

$$1\frac{2}{3} \times 4 =$$

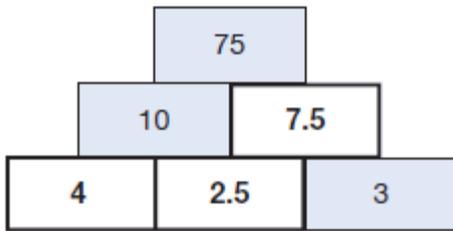


1 mark

Mark schemes

1

Gives the three correct numbers in their correct positions, ie:



Accept unambiguous indication

Accept equivalent fractions, eg:

- $7\frac{5}{10}$ for 7.5

2

or

Gives two correct numbers in their correct positions

1

[2]

2

Award **TWO** marks for the correct answer of 15 680

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg:

- long multiplication algorithm, eg

$$\begin{array}{r}
 560 \\
 \times 28 \\
 \hline
 11200 \\
 4480 \\
 \hline
 \text{wrong answer}
 \end{array}$$

- grid method, eg

	500	60
20	10000	1200
8	4000	480

= wrong answer

- partitioning method, eg

$$560 \times 10 = 5600$$

$$560 \times 10 = 5600$$

$$560 \times 8 = \underline{4480}$$

wrong answer

- factorisation method, eg

$$560 \times 7 = 3920$$

$$3920 \times 4 = \text{wrong answer}$$

*In all cases accept follow through of **ONE** error in working.*

Do not award any marks if:

- the error is in the place value, eg the omission of the zero when multiplying by two tens, eg

$$\begin{array}{r} 560 \\ \times 28 \\ \hline 1120 \\ \hline 4480 \\ \hline \text{wrong answer} \end{array}$$

- the final (answer) line of digits is missing.

Variations on algorithms are acceptable, provided they represent viable and complete methods.

*Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2m

[2]

3

Award **TWO** marks for the correct answer of 16

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

- $56 \div 7 = 8$
 2×8

OR

- | | |
|------------------------|-------------|
| 7 quarter-circles | 2 triangles |
| 14 quarter-circles | 4 triangles |
| 28 quarter-circles | 8 triangles |
| 56 quarter-circles ... | |

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

Up to 2

[2]

4

Award TWO marks for the correct answer of 3.6

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

- $10 \div 0.05 = 200$
 $200 \times 1.8 = 360$
 $360 \div 100$

OR

- 20 5p coins make £1
200 5p coins make £10
 200×0.018

*Answer must be in metres for the award of **TWO** marks.*

*Accept for **ONE** mark 360 centimetres.*

*If the answer is incorrect, accept for **ONE** mark an answer of 36 multiplied by any power of 10 with no evidence of an incorrect method.*

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

Up to 2

[2]

5

26

Do not accept answer of £26

2

or

Shows or implies a complete method with not more than one computational error or rounding error

eg

- $35 \times 24.75 = 860$ (error)
 $1200 - 860 = 340$
 $340 \div 12.5 = 27.2$
 Answer = 27
- $(1200 - 35 \times 24.75) \div 12.5$
- $1200 - 866.25 = 333.75$
 $333.75 \div 12.5$

or

26.7 seen

or

Shows the correct total for the trees, ie £1191.25

or

Shows the correct change, ie £8.75

Do not accept answer of 27 without a correct method shown or implied*! Method used for $\div 12.5$ is repeated subtraction**Do not accept as a correct method*

1

[2]**6**

101

[1]

7

Award **TWO** marks for the correct answer of 34 314

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg:

- long multiplication algorithm, eg

$$\begin{array}{r}
 602 \\
 \times 57 \\
 \hline
 30100 \\
 4214 \\
 \hline
 \end{array}$$

wrong answer

- grid method, eg

	600	2
50	30000	100
7	4200	14

= wrong answer

- partitioning method, eg

$$\begin{array}{l}
 602 \times 10 = 6020 \\
 602 \times 20 = 12040 \\
 602 \times 20 = 12040 \\
 602 \times 7 = \underline{4214} \\
 \text{wrong answer}
 \end{array}$$

*In all cases accept follow-through of **ONE** error in working.*

Do not award any marks if:

- *the error is in the place value, eg the omission of the zero when multiplying by five tens, eg*

$$\begin{array}{r}
 602 \\
 \times 57 \\
 \hline
 3010 \\
 4214 \\
 \hline
 \end{array}$$

wrong answer

- *the final (answer) line of digits is missing.*

Variations on algorithms are acceptable, provided they represent viable and complete methods.

*Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2

[2]

8

Award **TWO** marks for the correct answer of £19.38

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

$$114 \times 1.36 \div 8$$

OR

$$114 \times 136 \div 8$$

*Accept for **ONE** mark £1938 **OR** £1938p as evidence of appropriate working.*

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

Up to 2

[2]

9

63 AND **65**

Answers may be given in either order

U1

[1]

10

Award **TWO** marks for the correct answer of 5291

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- long multiplication algorithm such as

$$\begin{array}{r}
 143 \\
 \times 37 \\
 \hline
 1001 \\
 4290 \\
 \hline
 \text{wrong answer}
 \end{array}$$

- grid method

	100	40	3
30	3000	1200	90
7	700	280	21

= wrong answer

- decomposition methods, eg

$143 \times 40 = 5720$

$143 \times 3 = 429$

$5720 - 429 = \text{wrong answer}$

*In all cases accept follow through of **ONE** error in working.*

Do not award any marks if:

- the error is in the place value, eg the omission of the zero when multiplying by three tens,

$$\begin{array}{r} 1001 \\ + 429 \\ \hline \end{array}$$

- the final (answer) line of digits is missing.

Variations on algorithms are acceptable, provided they represent viable and complete methods.

*Calculation must be performed for the award of **ONE** mark.*

Up to 2

[2]

11

221.2

[1]

12

Award **TWO** marks for the correct answer of 2.4

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

$6 \times 8 = 48 \text{ (48g fibre in one loaf)}$

$48 \div 20$

OR

$800 \div 20 = 40 \text{ (one slice weighs 40g)}$

$6\% \text{ of } 40$

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

Up to 2

[2]

13

367.5 **OR** $367\frac{1}{2}$

[1]

14

Award **TWO** marks for the correct answer of £74

Accept for **TWO** marks £74.00 **OR** £74.00p **OR** £74 00 **OR** £74 00p

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which involves a complete and correct method, eg

$$50p \times 100 = 5000p = £50$$

$$30p \times 80 = 2400p = £24$$

$$£50 + £24 = \text{wrong answer}$$

OR

Award **ONE** mark for £7400p **OR** £7400 **OR** £7.40 **OR** £7.40p **OR** £740p as evidence of appropriate working.

*An answer must be given for the award of **ONE** mark.*

Up to 2

[2]

Examples of responses

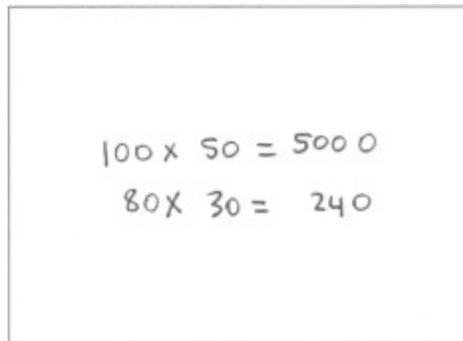
Although Liam has not shown any working, we can assume from his answer of £7400p that he has used a complete and correct method, even though he made an error with the notation of the units. Liam can be awarded the mark. Daisy has calculated the cost for both the adults and the children but has not recorded a complete method since she has not totalled the two amounts. Since she has provided no evidence of her intended answer, her method is not complete. Daisy cannot be awarded the mark.

Liam



1 mark

Daisy



0 marks

Anna has recognised the need to multiply 30p by 80 and 50p by 100, to find the total of these, and to convert pence to pounds and pence. She made an error in totalling the amounts but her understanding of place value was sound. Anna can be awarded the mark. Her method is complete and correct. Tarun also has recognised the need to carry out the same operations but cannot be awarded the mark since his error is in a misunderstanding of place value. He has omitted the final zero when multiplying by 50 and 30. Although his method is complete, it is not correct. Tarun cannot be awarded the mark.

Anna

$$\begin{array}{l}
 8 \times 3 = 24 \\
 (80 \times 30 = 2400) \\
 10 \times 5 = 50 \\
 (100 \times 50 = 5000) \\
 \\
 7.20
 \end{array}$$

1 mark

Tarun

$$\begin{array}{l}
 100 \quad 80 \quad 240 \\
 \times 50 \quad \times 30 \quad + 300 \\
 \hline
 300 \quad 240 \quad 5.40 \\
 \\
 5.40
 \end{array}$$

0 marks

Joe's working shows evidence that he understood the steps he needed to take to find the answer. Although he made an error in calculating 8 multiplied by 3 as 22, his knowledge of place value was secure and he correctly converted pence to pounds and pence. His method is complete and correct. Joe can be awarded the mark. Kirsty's method and error in multiplying 8 by 3 are similar to Joe's but she has failed to convert the number of pence to pounds and pence. Her method is not complete or correct. Kirsty cannot be awarded the mark.

Joe

$$\begin{array}{l}
 50p \times 100 = 5000 \text{ } \otimes \\
 50p \times 80p = 2200 \\
 30p \\
 \\
 72.00
 \end{array}$$

1 mark

Kirsty

$$\begin{array}{l}
 100 \quad 80 \\
 \times 50 \quad \times 30 \\
 \hline
 5000 \quad + 2200 = 7500 \\
 \\
 7500
 \end{array}$$

0 marks

15

5 and 6 written in the boxes in either order as shown:

$$\boxed{5} \boxed{0} \times \boxed{6} \boxed{0} = \boxed{3} \boxed{0} \boxed{0} \boxed{0}$$

OR

$$\boxed{6} \boxed{0} \times \boxed{5} \boxed{0} = \boxed{3} \boxed{0} \boxed{0} \boxed{0}$$

[1]

16

Award **TWO** marks for the correct answer of 12216

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- conventional algorithms such as:

$$\begin{array}{r}
 509 \\
 \times 24 \\
 \hline
 2036 \\
 10180 \\
 \hline
 \text{wrong} \\
 \text{answer}
 \end{array}$$

*In all cases accept follow through of **ONE** error in working.*

Do not award any marks if:

- the error is in the place value, for example the omission of the zero when multiplying by the 2 tens;*
- the final (answer) line of digits is missing.*

Variations on algorithms are acceptable, provided they represent viable and complete methods.

OR

- decomposition methods, eg
 $24 \times 500 = 12000$
 $24 \times 9 = 216$
 $12000 + 216 = \text{wrong answer}$

*Calculation must be performed for the award of **ONE** mark.*

Up to 2

[2]

17

3 AND 7 AND 11

Accept numbers in any order.

[1]

18

10 (100) 1000 (10 000) 100 000

OR

(10) 100 1000 10 000 (100 000)

Accept alternative indications such as the numbers crossed or underlined.

Do not accept 1000 circled twice.

[1]

19

Explanation which indicates that 300 can be added to 195, eg

- 'It's 3 × 100 more';
- 'You add another 300 on';
- '3 × 65 = 195, 3 × 100 = 300 so it's 495';
- '100 has been added to 65, so multiply 100 by 3 and add it to 195'.

*An answer to the multiplication is not required and **no mark** is awarded for it.*

Do not accept vague answers such as:

- 'You work it out';
- 'Do a sum';
- 'It's nearly the same except it has 100 in front of it'.

[1]**20**

Award **TWO** marks for a correct answer of 14204.

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, which contains no more than **ONE** arithmetic error, eg

- Long multiplication, such as

$$\begin{array}{r} 268 \\ \times 53 \\ \hline 804 \\ 13400 \end{array}$$

wrong answer

- Short multiplication, such as

$$\begin{array}{r} 268 \\ \times 53 \\ \hline \end{array}$$

wrong answer

AND evidence of multiplication taking place, eg the presence of appropriate carrying figures.

- Repeated addition such as attempts to add 268 fifty-three times.
- Decomposition methods such as

$$\begin{array}{r} 200 \\ \times 53 \\ \hline 10600 \end{array} \quad \text{AND} \quad \begin{array}{r} 68 \\ \times 53 \\ \hline 3604 \end{array}$$

AND
$$\begin{array}{r} 10600 \\ + 3604 \\ \hline \end{array}$$

wrong answer

- Any combination of methods which are viable and complete such as

$$268 \times 3 = 804$$

$$268 \times 100 = 26800$$

$$26800 \div = 13400$$

$$\begin{array}{r} 13400 \\ + 804 \\ \hline \end{array}$$

wrong answer

In all cases accept follow through of an error in working.

Do not award any marks if:

- the final answer line of digits is missing;
- any place value error is made.

Variations on standard algorithms are acceptable, provided they represent viable and complete methods.

Do not award any marks if 268 is added the wrong number of times.

up to 2

[2]

21

Award **TWO** marks for a correct answer of 29160

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

$$18 \times 36 \times 45$$

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

Up to 2

[2]

22

Award **TWO** marks for the correct answer of 25p **OR** £0.25 **OR** 25 pence.

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg $600 \div 24 =$ wrong answer.

*Accept £0 25 **OR** £0.25p **OR** £0 25p **OR** 25 **OR** 0.25 **OR** £0-25.*

*Calculation must be performed for the award of **ONE** mark.*

Up to 2

[2]

23

Award TWO marks for the correct answer of 9913.

If the answer is incorrect award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- Long multiplication, such as

$$\begin{array}{r} 431 \\ \times 23 \\ \hline 1293 \\ 8620 \\ \hline \end{array}$$

wrong answer

In all cases accept follow through of an error in working.

- Short multiplication, such as

$$\begin{array}{r} 431 \\ \times 23 \\ \hline \end{array}$$

wrong answer

Do not award any marks if:

- *the error is in the place value, for example the omission of the zero when multiplying by the 2 tens;*
- *the final (answer) line of digits is missing.*

Variations on algorithms are acceptable, provided they represent viable and complete methods.

AND evidence of multiplication taking place, eg the presence of appropriate carrying figures.

- Repeated addition, such as attempts to add 431 twenty-three times.
- Decomposition methods, such as

$$\begin{array}{r} 400 \\ \times 23 \\ \hline 9200 \end{array} \quad \text{AND} \quad \begin{array}{r} 31 \\ \times 23 \\ \hline 713 \end{array}$$

AND

$$\begin{array}{r} 9200 \\ +713 \\ \hline \end{array}$$

wrong answer

- Any combination of methods which are viable and complete, such as $431 + 431, = 862$

$$\begin{array}{r} 431 \\ \times 3 \\ \hline 1293 \end{array} \quad \begin{array}{r} 8620 \\ +1293 \\ \hline \end{array}$$

wrong answer

Do not award any marks if 431 is added the wrong number of times.

up to 2

[2]

24

- (a) £6331.90

Accept £6331.90p **OR** £6331 90

Do not accept £6331.9

1

- (b) Award **TWO** marks for the correct answer of 943.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg $61295 \div 65$ **OR** $612.95 \div 0.65$

Do not accept $612.95 \div 65$.

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

Up to 2

[3]

25

Explanation that implies that 28 must be added to 3836, eg:

- 'Just add another 28 on'
- 'Do another 28 on'
- 'It's an extra 28'
- '3836 + 28'

Do not accept vague or arbitrary reasons, eg:

'Do the same sum but add 1 to the number';

'Do a times sum';

'Just another unit on'.

No mark is awarded for giving the answer 3864 without an adequate explanation.

[1]**26**

(a) 55

1

(b) Award **TWO** marks for the correct answer of 11

If the answer is incorrect, award **ONE** mark for appropriate calculation, eg:

- $280 - 30 = 250$
- $(250 \div 25) + 1 = \text{incorrect answer.}$

up to 2

[3]**27**

$$\boxed{5} \boxed{3} \times \boxed{7} = 371$$

[1]**28**

Any 3-digit number that is a multiple of 14, eg:

$$\boxed{3} \boxed{0} \boxed{8}$$

Any acceptable answers will be even numbers which divide by 7

Do not accept '0' in the hundreds box.

Only **three digit** numbers are acceptable.

[1]**29**

Award **TWO** marks for the correct answer of 10, even if there are errors in the working.

If the answer is incorrect, award **ONE** mark for evidence of any attempt at solution, by any method, eg:

- $31 \div 6.2$ and $9 \div 4.5$ are attempted calculations;
- $31 \div 6.2$ and $9 \div 4.5$ are estimated;
- "You can get two boxes widthways and 5 lengthways".

Up to 2

[2]

30

$$\boxed{3}92 \div 14 = 28$$

Accept 3 wherever it is written provided the intention is clear.

[1]**31**

$$323 \times \boxed{4}7 = 1518\boxed{1}$$

both numbers correct.

Accept 4 and 1 wherever they are written provided the intention is clear.

[1]**32**

(a) 29

1

(b) Award **TWO** marks for £7.52 **with** appropriate working (see below), even if there is an error in the working.

If answer is incorrect, award **ONE** mark for use of an appropriate method and a partially correct computation, eg:

- $7 \times 48 + 8 \times 52 = 336 + 406$ (incorrect second part)
- $7(48 + 52) + 52 = 7 \times 100 + 52 = 742$ (incorrect)
- $7 \times 40 + 7 \times 8 + 8 \times 50 + 8 \times 2 = 7 \times 47 \times 16 \times 58 \times 2$ (incorrect)

Accept £7.52 **OR** £7 52p **OR** £7 52 **OR** answers in words **OR** combination of numbers and words.

Mark can **only** be awarded for evidence of calculation taking place. It cannot be awarded if the expression is set out but partially correct computation is **not** in evidence.

Up to 2**[3]****33**

(a) Award **TWO** marks for 7500cm² even if there are errors in working. If answer is incorrect, award **ONE** mark for evidence of attempt to calculate 60×125 by any appropriate method involving multiplication (not repeated addition only) and some correct partial solution, eg:

- $60 \times 100 + 60 \times 20 + 60 \times 5 = 6000 + 120 + 30$ (partially correct)
- $10 \times 125 \times 6 = 1205 \times 6$ (incorrect answer given)
- $60 \times 125 = 750$ (incorrect answer given)

Up to 2

(b) Award **TWO** marks for the correct answer of 1500cm²
OR
TWO marks for correct calculation of 20% of answer given to (a)

If the answer is incorrect award **ONE** mark for evidence of an attempt to calculate 20% by an appropriate method, eg:

- 20% is $\frac{1}{5}$, so that's $7500 \div 5 =$ (incorrect answer given)

In marking part (b) give credit to children who correctly calculate 20% of their answer to (a), even if their answer to (a) was incorrect.

The writing of an expression such as:

- $20/100 \times 7500$
- 0.2×7500

alone, without working, is insufficient for the award of the mark.

Up to 2

[4]

34

Award **TWO** marks for 39.6 km, even if there are errors in the working.

If the answer is incorrect, award **ONE** mark for evidence of correct partial result 6×6.6 by any appropriate method (not repeated addition only), eg:

- $6 \times 6.6 = 36 + \dots$ (incorrect answer given)
- $6 \times 6.6 = 396$

The writing of an expression such as:

- **6×6.6**

alone, without attempt at calculation, is insufficient for the mark.

Up to 2

[2]

35

445.2

[1]

36

$\frac{1}{6}$

[1]

37

34800

[1]

38

3.5

[1]

39

$\frac{1}{16}$

[1]

40

3.2

[1]

41

5

[1]

42

$$\frac{1}{12}$$

[1]

43

20

[1]

44

$$\frac{1}{8}$$

[1]

45

For 2 marks:

73 450

For 1 mark:

$$\begin{array}{r}
 2825 \\
 \times 26 \\
 \hline
 16950 \\
 56500 \\
 \hline
 73450
 \end{array}$$

*An error in one row, then added correctly,
or an error in the addition*

Up to 2

[2]

46

$$2\frac{2}{3}$$

[1]

47

$$\frac{1}{15}$$

[1]

48

9780

[1]

49

25

[1]

50 For 2 marks:

77 486

For 1 mark:

$$\begin{array}{r}
 1802 \\
 \times 43 \\
 \hline
 5406 \\
 72080 \\
 \hline
 77486
 \end{array}$$

*An error in one row, then added correctly,
or an error in the addition*

Up to 2

[2]

51 8

[1]

52 Gives two numbers which differ by 1, the lower of which is in the range 2.5 to 2.5823 **exclusive**, eg:

- 2.55 and 3.55

Numbers may be given in either order

2

or

Gives at least one number in the range 2.5 to 2.5823 exclusive

or

3.5 to 3.5823 exclusive

1

[2]

53 $8\frac{1}{4}$

[1]

54 (a) 375

Award the mark for correct answer, even if the working is incorrect.

1

(b) 36

Award the mark for correct answer, even if the working is incorrect.

1

[2]

55 (a) Award **TWO** marks for the correct answer of 2500 ml, even if the working is incorrect.

If answer is incorrect, award **ONE** mark for evidence of attempt to calculate the answer to $1500 \div 6 \times 10$ by any appropriate method, eg:

- 6 people need 1500, so 12 people need 3000, 2 people need 300 (incorrect answer given), so 10 people need $3000 - 300 = 2800$ (incorrect answer given) OR
- $1500 \div 6 = 250$, $250 \times 10 = 25000$ (incorrect answer given).

*The writing of an expression such as “ $1500 \div 6 \times 10$ ” **alone** is insufficient for the award of the mark.*

Up to 2

(b) Award **TWO** marks for the correct answer of 16, even if the working is incorrect.

If answer is incorrect, award **ONE** mark for evidence of attempt to calculate the answer to $2000 \div 750 \times 6$ by any appropriate method, eg:

- 750 is for 6 people, so 1500 is for 12 people, 2250 is for 18 people; 250 would be for 3 people (incorrect answer given), so 2000 is for $18 - 3 = 15$ people (incorrect answer given) OR
- $750 \div 6 = 120$ (incorrect answer given), $2000 \div 120 = 16.67$ (incorrect answer given).

*The writing of an expression such as “ $2000 \div 750 \times 6$ ” **alone** is insufficient for the award of the mark.*

Up to 2

[4]

56

$$\frac{3}{28}$$

[1]

57

$$6\frac{2}{3}$$

[1]