

$$\begin{array}{r} 2195 \\ \times \quad 3 \\ \hline \end{array}$$

1 mark

 $8628 \div 4 =$ 

1 mark

Calculate **560 × 28**



2 marks

$$2416 \div 8 =$$

1 mark

**5**

$$\boxed{\phantom{000}} \times 10 = 350.5$$

$$460 \div \boxed{\phantom{000}} = 4.6$$

$$2.3 \times \boxed{\phantom{000}} = 2300$$

2 marks

**6**

Write in the missing digits to make this correct.



$$\begin{array}{r} \boxed{\phantom{0}} \quad 4 \quad \boxed{\phantom{0}} \\ \times \qquad \qquad \qquad 6 \\ \hline 2 \quad 0 \quad 5 \quad 2 \\ \hline \end{array}$$

2 marks

7

Amir says,

*'All numbers that end in a 4 are multiples of 4'.*



Is he correct?

Circle **Yes** or **No**.

 Yes / No

Explain how you know.

A large, empty, cloud-shaped outline with a scalloped border, intended for the student to write their explanation.

1 mark

8

A spoonful is **5ml**.




How many spoonfuls can you get from this bottle?

1 mark

9

Write what the **three** missing digits could be in this calculation.



--	--

 × 

--

 = 

3	7	8
---	---	---

1 mark

10

A gardener plants tulip bulbs in a flower bed.  
She plants 3 red bulbs for every 4 white bulbs.  
She plants 60 red bulbs.



How many **white** bulbs does she plant?



Show your method




2 marks

11

The **same** number is missing from each box.

Write the **same** missing number in each box.

   $\times$    $\times$   = 1331

1 mark

12

In a country dance there are **3 boys** and **2 girls** in every line.



**42 boys** take part in the dance.

How many **girls** take part?

Show your method

2 marks

13

A 5p coin has a diameter of 1.8 centimetres.



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

£10



How long is Holly's line?

Give your answer in **metres**.

Show your method

m

2 marks

## Mark schemes

**1** 6585 [1]

**2** 2157 [1]

**3** 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

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

wrong answer

- grid method, eg

	500	60
20	10000	1200
8	4000	480

= wrong answer

- partitioning method, eg

$$\begin{aligned} 560 \times 10 &= 5600 \\ 560 \times 10 &= 5600 \\ 560 \times 8 &= \underline{4480} \\ &\text{wrong answer} \end{aligned}$$

- factorisation method, eg

$$\begin{aligned} 560 \times 7 &= 3920 \\ 3920 \times 4 &= \text{wrong answer} \end{aligned}$$

*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*

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

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 2m

[2]

4

302

[1]

5

All three correct

35.05

100

1000

2

or

Any two correct

1

[2]

6

$$\begin{array}{r} \boxed{3} \ 4 \ \boxed{2} \\ \times \qquad \qquad 6 \\ \hline 2 \ 0 \ 5 \ 2 \end{array}$$

(a) 3 in left hand box

1

(b) 2 in right hand box

1

[2]

7

An explanation which gives a counter-example to illustrate that not all numbers ending in 4 are multiples of 4, eg:

- '14 is not a multiple of 4'
- '4, 24 and 44 are multiples of 4, but not 14 and 34'
- '14 or 34 don't work'
- '54'

OR

an explanation which recognises that only numbers ending in 4 which have an even number of tens are multiples of 4, eg:

- 'It has to have an even number of 10s as well, like 20 or 40'
- '14, 24, 34, 44, 54, 64 – only half of them are'
- '4 doesn't go into 10 so 14 isn't'.

*No mark is awarded for circling 'No' alone.*

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

- 'Some numbers end in a 4 but aren't multiples of 4'
- '16 doesn't end in 4'
- 'Not all multiples of 4 end in 4'
- '24 is a multiple of 4 but the next one isn't'
- '4, 8, 12, 16, 20, 24 etc'.

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

U1

[1]

8

75 (spoonfuls)

[1]

9

Calculation completed correctly as shown:

$$\boxed{6} \boxed{3} \times \boxed{6} = \boxed{3} \boxed{7} \boxed{8}$$

OR

$$\boxed{5} \boxed{4} \times \boxed{7} = \boxed{3} \boxed{7} \boxed{8}$$

OR

$$\boxed{4} \boxed{2} \times \boxed{9} = \boxed{3} \boxed{7} \boxed{8}$$

[1]

**10**

Award **TWO** marks for the correct answer of 80

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

- $60 \div 3 = 20$   
 $20 \times 4$

**OR**

- 3 red 4 white  
30 red 40 white  
60 red...

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

Up to 2

[2]

**11**

$$\boxed{11} \times \boxed{11} \times \boxed{11}$$

*Accept answer elsewhere, if boxes are blank.*

*Accept 11 written only once, if other boxes are blank.*

[1]

**12**

Award **TWO** marks for the correct answer of 28.

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

- $42 \div 3 \times 2$
- 3b and 2g  
6b and 4g  
.  
.  
.  
42b and
- $\begin{array}{ccccccc} 3 & 6 & 9 & 12 & \dots & 42 \\ 2 & 4 & 6 & 8 & & \end{array}$

*An actual calculation is **not** required for the award of one mark.*

*Appropriate strategy must include use of  
3 : 2 (boys : girls) ratio.*

Up to 2

[2]

**13**

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  
 $200 \times 0.018$

*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]**