1 Write the three missing numbers in this multiplication grid.
*

| $\times$ | 8 | 5 |  |
| :---: | :---: | :---: | :---: |
| 4 |  | 20 | 28 |
| 5 | 40 |  | 35 |
| 3 | 24 | 15 | 21 |

2
$24 \times 7=$


1 mark
3
$87 \div 3=$


1 mark
$4319 \times 6=$


1 mark
5
$686 \div 8=$


1 mark

6 Calculate $465 \times 52$


7
There are 5 balloons in a packet.
There are 18 packets in a box.


How many balloons are there altogether in a box?


1 mark

There are 5 balloons in a packet.


Kofi needs 65 balloons.
How many packets does he need?


1 mark
8 At a tournament there are 7 players in each team.
There are 112 players altogether.
How many teams is this?

1 mark
9 Complete these calculations.
©
15
$\times \quad 100$
$=\square$

$\times$
10
$=$
1500

$\div 100=$
150
150

$$
\div 10=\square
$$

10 Write the missing number.


11 Three single-digit numbers multiply to make 504
Write the missing numbers.


1 mark
12 Dev has a bag of 50p coins and Holly has a bag of 20p coins.



Holly's bag

Both bags have the same amount of money in.
There are thirty 50p coins in Dev's bag.
How many 20p coins are there in Holly's bag?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| method |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | coins |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | coins |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

13 Two 2-digit numbers multiply to make 176
Write the two missing numbers.


1 mark
A shop sells jars of honey and honey dippers.


By brockvicky [CC BY-SA 2.0], via Flickr jar of honey


By Thien Gretchen [CC BY-SA 2.0], via Flickr
honey dipper

Chen bought three jars of honey and a dipper.
The total cost was $£ 5.40$
The dipper cost 75p.
How much did each jar of honey cost?


## Mark schemes

1 Award TWO marks for all three numbers correct as shown:

| $\times$ | 8 | 5 | 7 |
| :---: | :---: | :---: | :---: |
| 4 | 32 | 20 | 28 |
| 5 | 40 | 25 | 35 |
| 3 | 24 | 15 | 21 |

If the answer is incorrect, award ONE mark for two numbers correct.
Up to 2

## 2 <br> 168

$3 \quad 29$
4
1914

585 r6 or 85.75 or $85 \frac{3}{4}$ or $85 \frac{6}{8}$

6 Award TWO marks for the correct answer of 24180.
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

| 465 |
| ---: |
| $\times \quad 52$ |
| 23250 |
| 930 |

wrong answer

- grid method, eg

|  | 400 | 60 | 5 |
| ---: | ---: | ---: | ---: |
| 50 | 20000 | 3000 | 250 |
| 2 | 800 | 120 | 10 |

- partitioning method, eg

$$
\begin{aligned}
& 465 \times 10=4650 \\
& 465 \times 20=9300 \\
& 465 \times 20=9300 \\
& 465 \times 2=\underline{930} \\
& \text { wrong answer }
\end{aligned}
$$

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 tens, eg

| 465 |
| ---: |
| $\times \quad 52$ |
| 2325 |
| 930 |
| 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.
$7 \quad$ (a) 90
(b) 13

## 8

16
.

9 Award TWO marks for all four values correct as shown:

$$
\begin{aligned}
& 15 \times 100=1500 \\
& 150 \times 10=1500 \\
& 15000 \div 100=150 \\
& 150 \div 10=15
\end{aligned}
$$

If the answer is incorrect, award ONE mark for three values correct.
Up to 2
[2]
$10 \quad 187 \div 11=17$

11


Numbers may be given in any order.
U1

12 Award TWO marks for the correct answer of 75
If the answer is incorrect, award ONE mark for evidence of appropriate method, eg:

- $30 \times 50=1500$
$1500 \div 20$


## OR

- $30 \times 50 \mathrm{p}=£ 15$

5 20p coins make £1
$5 \times 15$
OR

- $50 p \div 20 p=2.5$ $30 \times 2.5$

Answer need not be obtained for the award of ONE mark.
Up to 2
[2]
13

| 1 | 1 |
| :--- | :--- |

Numbers may be given in either order.

Award TWO marks for the correct answer of $£ 1.55$
If the answer is incorrect, award ONE mark for evidence of an appropriate method, eg
$£ 5.40-£ 0.75=£ 4.65$
$£ 4.65 \div 3$
Accept for ONE mark £155 OR £155p OR $1.55 p$
as evidence of an appropriate method.
Answer need not be obtained for the award of ONE mark.

Up to 2

