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

×	8	5	
4		20	28
5	40		35
3	24	15	21

2 marks

2. 24 × 7 =

1 mark

3. 87 ÷ 3 =

1 mark

4. 319 × 6 =

1 mark

5. 686 ÷ 8 =

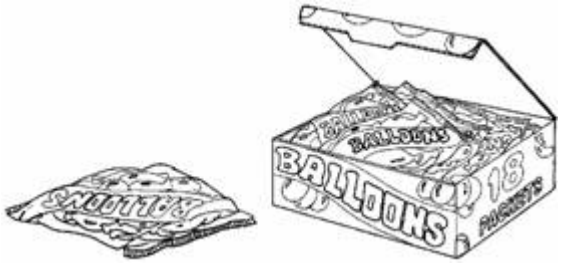
1 mark

6. Calculate **465 × 52**

2 marks

7. There are **5 balloons** in a **packet**.

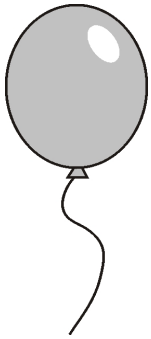
There are **18 packets** in a **box.**



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 × 100 = ☐

☐ × 10 = 1500

☐ ÷ 100 = 150

150 ÷ 10 = ☐

2 marks

10. Write the missing number.

$\square \div 11 = 17$

1 mark

11. Three single-digit numbers multiply to make 504

Write the missing numbers.

$\square \times \square \times \square = 504$

1 mark

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

Dev's bag

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?

Show your method

20p coins

2 marks

13. Two 2-digit numbers multiply to make 176

Write the two missing numbers.

			×			= 176

1 mark

14. 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?

Show your method

2 marks

Mark schemes

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

×	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]

2. 168

[1]

3. 29

[1]

4. 1914

[1]

5. 85r6 or 85.75 or $85\frac{3}{4}$ or $85\frac{6}{8}$

[1]

6. Award **TWO** marks for the correct answer of 24 180.

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
 ×  52
 23250
  930
wrong answer
```

- grid method, eg

	400	60	5
50	20000	3000	250
2	800	120	10

■ partitioning method, eg

465 × 10 = 4650
465 × 20 = 9300
465 × 20 = 9300
465 × 2 = 930
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 tens, eg*

```
  465
×  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.*

Up to 2m

[2]

7. (a) 90

1

(b) 13

1

[2]

8. 16

[1]

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

15 × 100 = 1500

150 × 10 = 1500

15000 ÷ 100 = 150

150 ÷ 10 = 15

If the answer is incorrect, award **ONE** mark for three values correct.

Up to 2

[2]

10. **187** ÷ 11 = 17

[1]

11. **7** × **8** × **9**

Numbers may be given in any order.

U1

[1]

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 × 50 = 1500
  1500 ÷ 20

OR

- 30 × 50p = £15
  5 20p coins make £1
  5 × 15

OR

- 50p ÷ 20p = 2.5
  30 × 2.5

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

Up to 2

[2]

13. **1** **1** × **1** **6**

Numbers may be given in either order.

[1]

14. 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 ÷ 3

*Accept for **ONE** mark £155 **OR** £155p **OR** 1.55p as evidence of an appropriate method.*

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

Up to 2

[2]