Q1.

Put a ring round **two** numbers which divide by 5 with **no remainder**.

7 60 19 45 37 58

1 mark

Q2.

Write in the **missing** number.

$8 \times \square = 400$

1 mark

Q3.

A box holds 6 eggs.

How many boxes are needed to hold 52 eggs?

1 mark

Q4.

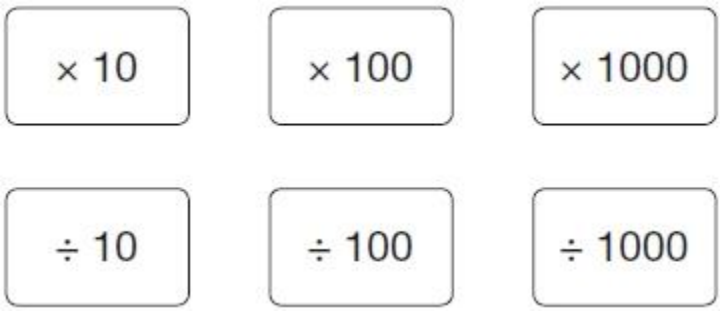
Write the missing number.

$12.5 \div \square = 7.5 \div 1.5$

1 mark

Q5.

Here are six cards.



Use a card to complete each calculation.

$5.3 \square = 0.53$

$5.3 \square = 5300$

$5.3 \square = 0.053$

2 marks

Q6.

Put **brackets** into this expression to make it correct.

$10^2 \div 10 \div 10 \div 10 \div 10 = 100$

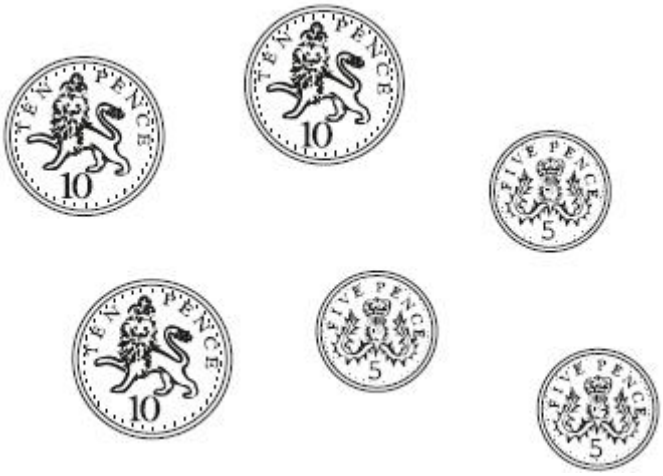
1 mark

Q7.

The mass of a 10p coin is 6.5 g.

The mass of a 5p coin is half the mass of a 10p coin.

What is the mass of these six coins **altogether**?



Show your method

g

2 marks

Q8.

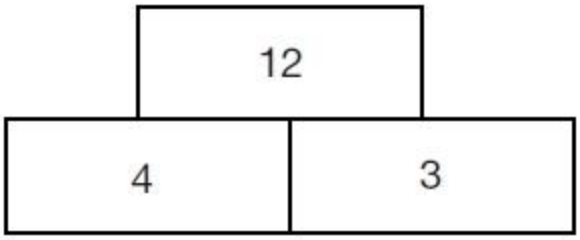
Calculate 936 ÷ 36

Show your method

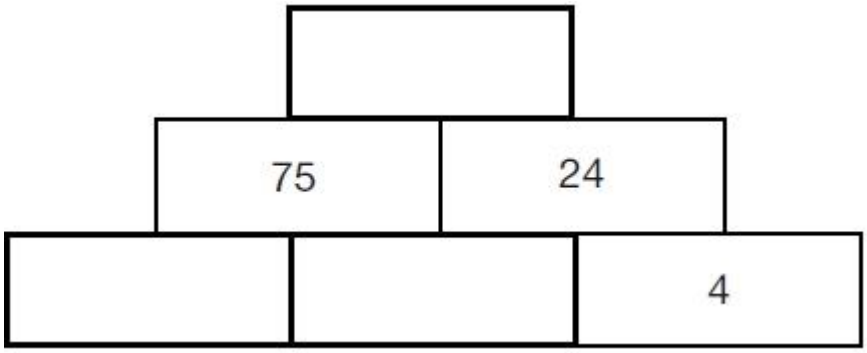
2 marks

Q9.

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

Q10.

(a) 1 kilogram of grapes costs £5.80

Megan buys 700 grams of grapes.

How much does she pay?

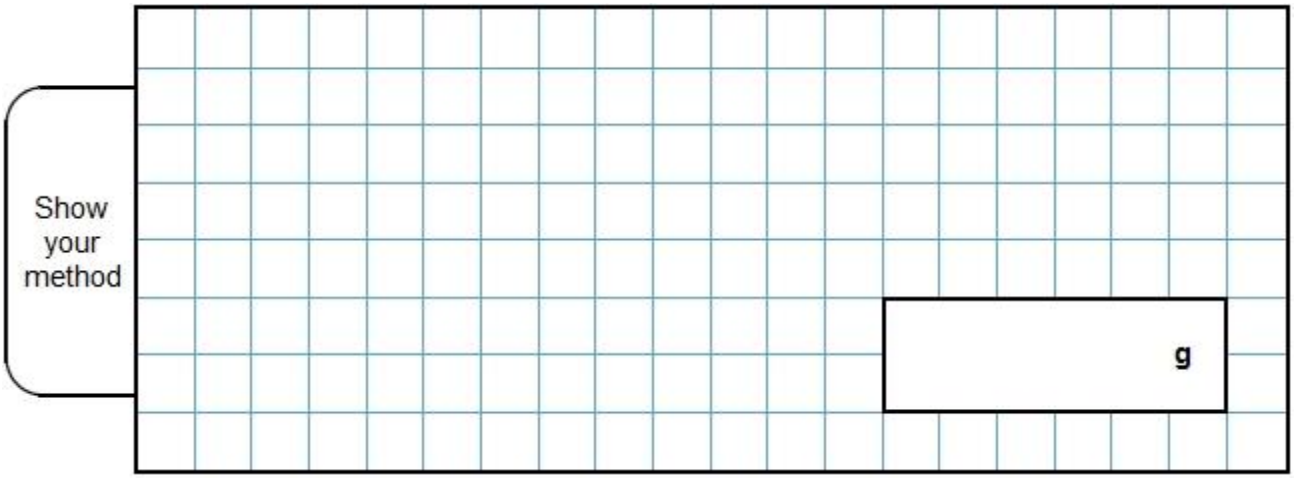
£

1 mark

(b) 1 kilogram of cheese costs £13.50

Megan buys a piece of cheese costing £2.49

What is the mass of the cheese to the **nearest 100 grams**?



2 marks

Q11.

Write the missing number in each calculation.

25 ÷ ☐ = 3 remainder 4

1 mark

35 ÷ ☐ = 4 remainder 3

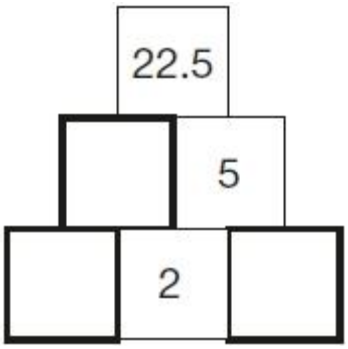
1 mark

Q12.

Here is a number pyramid.

The number in a box is the **product** of the two numbers below it.

Write the missing numbers.



2 marks

Mark schemes

Q1.

60 and 45

[1]

Q2.

50

[1]

Q3.

9 (boxes)

[1]

Q4.

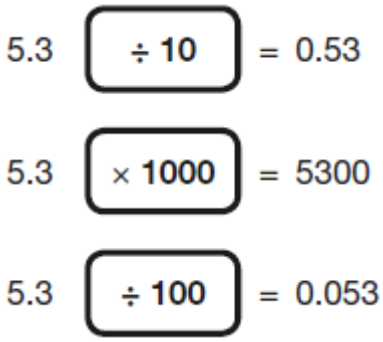
2.5

Accept equivalent fractions or decimals

[1]

Q5.

Award **TWO** marks for all three calculations completed correctly, as shown:



If the answer is incorrect, award **ONE** mark for two calculations correct.

Up to 2

[2]

Q6.

Brackets inserted correctly, eg

$10^2 \div (10 \div 10) \div (10 \div 10) = 100$

OR

$10^2 \div [(10 \div 10) \div 10)] \div 10 = 100$

OR

$(10^2 \div 10) \div [(10 \div 10) \div 10] = 100$

OR

$10^2 \div \{10 \div [10 \div (10 \div 10)]\} = 100$

OR

$10^2 \div [10 \div (10 \div 10) \div 10] = 100$

OR

$10^2 \div [10 \div 10 \div (10 \div 10)] = 100$

Accept alternative placing of brackets provided the original expression is unchanged and the answer is mathematically correct.

[1]

Q7.

Award **TWO** marks for the correct answer of 29.25g.

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

- 6.5 ÷ 2 = 3.25
  3 × 6.5 = 20.5 (*error*)
  3 × 3.25 = 9.75
  20.5 + 9.75

OR

- 10p + 5p weigh 6.5g + 3.25g = 9.75
  3 of each coin = 9.75 × 3

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

Up to 2

[2]

Q8.

Award **TWO** marks for the correct answer of 26

If the answer is incorrect award **ONE** mark for evidence of appropriate working which contains not more than **ONE** arithmetical error, eg:

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

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

- Long divisional algorithm

wrong answer

```
36 | 936
   -720
    216
   -216
      0
```

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

***Do not** award any marks if the final answer is missing.*

- Short division algorithm

wrong answer

```
36 | 93 21 6
```

Short division methods must be supported by evidence of appropriate carrying figures to indicate use of division algorithm and be a complete method.

- Repeated addition/subtraction methods, eg

936
−360 10 × 36
576
−360 10 × 36
216
−216 6 × 36
wrong answer

***No mark** is awarded for addition/subtraction the wrong number of times.*

- Factorisation methods, eg:

936 ÷ 9 = 104

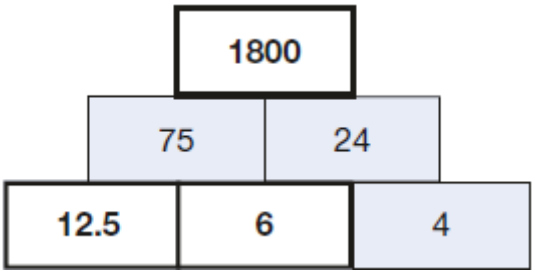
104 ÷ 4 = wrong answer

Up to 2

[2]

Q9.

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



Accept unambiguous indication

Accept equivalent fractions and decimals, eg:

- *accept* $12\frac{3}{6}$ *for 12.5*

2

or

Gives two correct numbers in their correct positions

1

[2]

Q10.

(a) £4.06

! Money

See guidance

1

(b) 200

! Measures
See guidance

2

or

Gives an answer of 180 or 184 or 184.4(…)

OR

Shows or implies a complete correct method, eg:

- 1000 × 2.49 ÷ 13.50
- £13.50 ÷ £2.49 = 5.42

  1000 ÷ 5.42
- 1350 ÷ 1000 = 1.35

  249 ÷ 1.35
- £1.35 = 100

  £2.70 = 200

! Inconsistent units
Within an otherwise correct method, condone
eg, for 1 mark accept:
- *(£)13.50 ÷ 1000 = 1.35(p)*
  (£)2.49 ÷ 1.35(p)
- *(£)13.50 ÷ 1000 = (£)0.0135*
  249(p) ÷ (£)0.0135

1

[3]

Q11.

(a) 7

1

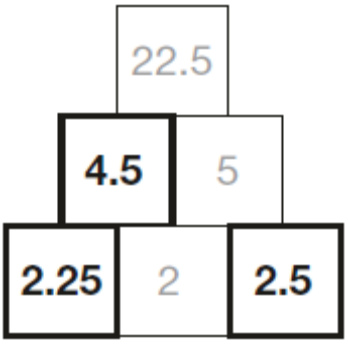
(b) 8

1

[2]

Q12.

Award **TWO** marks for three numbers correctly placed.



If the answer is incorrect award **ONE** mark for two numbers correctly placed.

Commentary: This question involves multiplying and dividing decimals where the answer has up to two decimal places (6F9).

Up to 2

[2]