## Reasoning: Multiplication 1

Q1.
Write the missing numbers to make this multiplication grid correct.


Q2.
Here is a multiplication.

$$
6 \times 10=60
$$

Write a division which uses these same 3 numbers.
$\square$
1 mark

Q3.
Write in the missing number.


Q4.

Ryan collects 2 comics each month for a whole year.


How many comics does he collect in a year?

Q5.
Look at each number sentence.
Put a tick ( $\checkmark$ ) if it is correct.
Put a cross $(\boldsymbol{X})$ if it is not correct.
$8 \times 2=8+8$
$3 \times 10=3+3+3$
$5 \times 4=5+5+5+5$ $\square$

Q6.
Write one number from each circle to make this calculation correct.


## Q7.

The number $\mathbf{2 0}$ goes in two of the squares of this multiplication grid.
Tick $(\sqrt{ })$ the two squares where 20 goes.

| $\times$ | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |

Q8.
In this grid, there are four multiplications.
Write the three missing numbers.

| 4 | $\times$ | 8 | $=$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $\times$ |  | $\times$ |  |  |
| 3 | $\times$ |  | $=$ | 21 |
| $=$ |  | $=$ |  |  |
|  |  | 56 |  |  |

9. 

Plastic cups are sold in packs of 8
Amir needs 27 cups.


How many packs must he buy?

There are 30 paper plates in a pack.
Amir buys 2 packs.
He uses 37 plates.


How many plates are left?

## Q10.

Write the correct sign $=,>$ or $<$ in each circle.
$9 \times 3$

$8 \times 4$
$9-3$

$8-4$
$9+3$

$8+4$
$9 \div 3$

$8 \div 4$

## Q11.

Joe has a box of 72 chocolates.


He gives 18 of the chocolates to his friends.
How many chocolates are left in the box?


1 mark
Holly has a box of mints.


She has 10 friends.
She gives them 5 mints each.
She has 13 mints left.
How many mints were in the box at the start?


## Q12.

A pack of paper has 150 sheets.
4 children each take 7 sheets.
How many sheets of paper are left in the packet?


Q13.
Write the missing numbers.


Q14.
Write the three missing numbers in this multiplication grid.

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

Mark schemes

## Q1.

Three boxes completed correctly as shown:


Q2.
$60 \div 10=6$
OR
$60 \div 6=10$
OR
$6=60 \div 10$
OR
$10=60 \div 6$
Award the mark if more than one correct answer is given.

Q3.
24

Q4.
24

Q5.
Number sentences ticked and crossed as shown:
$8 \times 2=8+8$

$3 \times 10=3+3+3$

$5 \times 4=5+5+5+5$


All three number sentences must be correctly ticked and crossed for the award of the mark.
Accept ticks and crosses placed elsewhere, provided it is
clear which number sentence they refer to.
Accept any other clear way of indicating the number sentences, such as ' $Y$ ' and ' $N$ '.

Q6.


OR
$5 \times 8-40$

Q7.
Grid completed as shown:

| $\times$ | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  | $\checkmark$ |
| 5 |  |  |  | $\checkmark$ |  |

Accept alternative unambiguous indications, eg 20 written only in the correct squares.

Q8.
Award ONE mark for three correct answers, as shown:

| 4 | $\times$ | 8 | $=$ | 32 |
| :---: | :---: | :---: | :---: | :---: |
| $\times$ |  | $\times$ |  |  |
| 3 | $\times$ | 7 | $=$ | 21 |
| $=$ |  | $=$ |  |  |
| $y n n n n$ |  |  |  |  |
|  |  |  |  |  |

## Q9.

(a) 4
(b) 23

## Q10.

Award TWO marks for all four symbols correct, as shown:
(<)
$>$
$=$
(>)

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

## Q11.

(a) 54
(b) 63

## Q12.

Award TWO marks for the correct answer of 122
If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g:

- $\quad 4 \times 7=28$

150-28
Answer need not be obtained for the award of ONE mark.
Up to 2

Q13.
(a) 63
(b) 5

Q14.
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.

