

# Autumn Test 4

## Teacher guidance



### Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to  $12 \times 12$  including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1
- Formal written method for short multiplication (to HTO) and short division (to TO)
- Division of two-digit numbers by 10 or 100
- Missing number statements with all four operations

## New: Square numbers

### A teaching suggestion

- Step 1** Give the children some squared paper.
- Step 2** Use the squares to draw a  $2 \times 2$  square and count the number of squares inside. Show that it has two rows and two columns and that  $2 \times 2 = 4$ .
- Step 3** Ask the children to investigate other squares that they can draw and to make a table of their results.

Rows	Columns	Number of squares
2	2	4

- Step 4** Collect and display the results and explain that these numbers are called 'square numbers' because they make squares!
- Step 5** Chant the square times table ( $1 \times 1 = 1$ ,  $2 \times 2 = 4$ ,  $3 \times 3 = 9$  and so on).
- Step 6** Introduce the notation where  $3^2 = 3$  multiplied by itself twice (hence the  $^2$ ) = 3 squared =  $3 \times 3 = 9$ .

Question number	Question	Answer	Marks	Related test
1	$\square = 5 \times 9$	45	1	Y4 Spring Test 2
2	$\frac{1}{3}$ of 60 = $\square$	20	1	Y2 Summer Test 5
3	$1 \times 1 = \square$	1	1	Y4 Autumn Test 6
4	$48 = \square \times 6$	8	1	Y4 Autumn Test 3, Y4 Spring Test 4
5	$2^2 = \square$	4	1	Y5 Autumn Test 4
6	$84 \div 12 = \square$	7	1	Y4 Summer Test 2
7	$11 \times 0 = \square$	0	1	Y4 Autumn Test 4
8	$72 \div 3 = \square$	24	1	Y4 Autumn Test 2
9	$\square = 45 \div 1$	45	1	Y4 Autumn Test 6
10	$642 - 353 = \square$	289	1	Y4 Spring Test 3
11	$7 \div 10 = \square$	0.7	1	Y5 Autumn Test 1
12	$315 \times 4 = \square$	1260	1	Y4 Summer Test 1
13	$\frac{11}{6} - \frac{4}{6} = \square$	$1\frac{1}{6}$ (or equiv)	1	Y5 Autumn Test 2
14	$74 \times 7 = \square$	518	1	Y4 Autumn Test 1
15	$74 \div 100 = \square$	0.74	1	Y5 Autumn Test 1
16	$\square = 304 - 126$	178	1	Y5 Autumn Test 3
17	$7173 + 1968 = \square$	9141	1	Y4 Spring Test 1
18	$\frac{3}{5} + \frac{4}{5} = \square$	$1\frac{2}{5}$ (or equiv)	1	Y5 Autumn Test 2
19	$\square = 33 \times 5 \times 6$	990	1	Y4 Summer Test 3
20	$9^2 = \square$	81	1	Y5 Autumn Test 4
21	$4 \times \square = 76$	19	1	Y4 Autumn Test 2, Y4 Autumn Test 3
22	$42 \div 10 = \square$	4.2	1	Y5 Autumn Test 1
23	$395 = \square - 416$	811	1	Y4 Spring Test 1, Y3 Autumn Test 1
24	$7000 - 2613 = \square$	4387	1	Y5 Autumn Test 3
25	$\square = 7^2$	49	1	Y5 Autumn Test 4
<b>Total marks</b>			<b>25</b>	