

# Spring Test 5

## Teacher guidance



### Skills and knowledge needed for this test:

- Addition and subtraction of two numbers with more than four digits
- Addition and subtraction of whole numbers and mixed decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Complements of 1
- Square and cube numbers
- Multiplication and division of whole numbers and decimals by 10, 100 and 1000
- Formal written method for short multiplication and short division with remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets

## New: Finding percentages of amounts

### A teaching suggestion

- Step 1** Display 10%, and ask the children what it means. Establish that  $10\% = \frac{10}{100} = \frac{1}{10}$ .
- Step 2** Display 10% of 60. Agree that it is the same as finding  $\frac{1}{10}$  of 60.
- Step 3** Use the method for finding fractions of amounts to calculate that  $\frac{1}{10}$  of 60 = 6.
- Step 4** Keep finding 10% of other numbers that end in zero until the children are quick and confident in finding 10% by dividing by 10.
- Step 5** Extend to finding 20%, 30% and so on by multiplying up the amount for 10%. Then extend to finding 5% by halving the amount for 10%. For example:

To find 35% of 80

$$10\% \text{ of } 80 = 8$$

$$30\% \text{ of } 80 = 3 \times 8 = 24$$

$$5\% \text{ of } 80 = \frac{1}{2} \text{ of } 8 = 4$$

$$35\% \text{ of } 80 = 24 + 4 = 28$$

Question number	Question	Answer	Marks	Related test
1	$6^2 = \square$	36	1	Y5 Autumn Test 4
2	$600 \times 100 = \square$	60 000	1	Y5 Autumn Test 5
3	$\square - 0.5 = 0.5$	1	1	Y5 Summer Test 4
4	$6759 \div 8 = \square$	844 r7	1	Y5 Autumn Test 6
5	$\square = 3287 \times 9$	29 583	1	Y5 Spring Test 3
6	$7435 = \square \times 5$	1487	1	Y5 Spring Test 5, Y4 Autumn Test 3
7	$\frac{1}{2} + \frac{1}{6} = \square$	$\frac{4}{6}$ (or equiv)	1	Y5 Spring Test 6
8	$\square \times 5 = 28 + 22$	10	1	Y6 Autumn Test 4
9	$15 - (3 + 4) = \square$	8	1	Y6 Spring Test 1
10	$\frac{2}{9}$ of 36 = $\square$	8	1	Y6 Autumn Test 3
11	$\frac{1}{4} \times \frac{1}{5} = \square$	$\frac{1}{20}$ (or equiv)	1	Y6 Spring Test 2
12	10% of 320 = $\square$	32	1	Y6 Spring Test 5
13	$\frac{2}{3} + \frac{14}{9} = \square$	$2\frac{2}{9}$ (or equiv)	1	Y6 Autumn Test 2
14	$7.6341 \div 1000 = \square$	0.0076341	1	Y6 Spring Test 3
15	$8346 + 59 + 645\,931 = \square$	654 336	1	Y5 Spring Test 4
16	$\square^3 = 8$	2	1	Y5 Spring Test 1
17	5% of 140 = $\square$	7	1	Y6 Spring Test 5
18	$\square = 384.2 - 79.56$	304.64	1	Y6 Autumn Test 5
19	$5.69 = 12.4 - \square$	6.71	1	Y6 Autumn Test 5, Y3 Autumn Test 1
20	$6000 - 3058 = \square$	2942	1	Y5 Autumn Test 3
21	$6356 \div 4 = \square$	1589	1	Y5 Spring Test 5
22	$6 = 2154 \div \square$	359	1	Y5 Spring Test 5, Y4 Autumn Test 3
23	$8000 - \square = 5843$	2157	1	Y5 Autumn Test 3, Y3 Autumn Test 1
24	$615 \times 62 = \square$	38 130	2*	Y6 Autumn Test 1
25	$6014 \div 31 = \square$	194	2*	Y6 Autumn Test 6
26	$\square = 15\% \text{ of } 360$	54	1	Y6 Spring Test 5
27	$8629 \times 54 = \square$	465 966	2*	Y6 Spring Test 4
<b>Total marks</b>			<b>30</b>	

\* award 1 mark if there is one error in the working