Spring Test 5

Teacher guidance

30 minutes

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
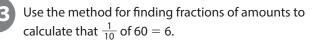- Multiplication and division of whole numbers and decimals by 10, 100 and 1000

- 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% of 80 = 8

30% of 80 = 3 × 8 = 24

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

35% 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	$\square = 15\%$ of 360	54	1	**Y6 Spring Test 5**
27	$8629 \times 54 = \square$	465 966	2*	**Y6 Spring Test 4**
	Total marks		30	

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