

Spring Test 1

Name: _____ Class: _____ Date: _____

1	$\times 6 = 24$	☐
2	$1 = 0.4 +$	☐
3	$5^2 =$	☐
4	$320 \times$ $= 3200$	☐
5	$= 7534 \div 4$	☐
6	$64 =$ 2	☐
7	$643.1 \div 10 =$	☐
8	$7 + 6 =$ $- 5$	☐
9	$= \frac{5}{6}$ of 48	☐
10	$\frac{1}{4} + \frac{5}{12} =$	☐
11	$6^3 =$	☐
12	$78.341 \times 1000 =$	☐
13	$\frac{7}{8} + \frac{3}{4} =$	☐
14	$9 - (5 + 2) =$	☐
15	$6285 \times 9 =$	☐
16	$6001 - 3125 =$	☐

Spring Test 1 (continued)

17	$7 \overline{) 4655}$	☐
18	$48.7 = 3.48 +$	☐
19	$= 3 \times (4 + 2)$	☐
20	$900 -$ $= 642$	☐
21	$7056 =$ $\times 8$	☐
22	$20 \div (4 + 1) =$	☐
23	$= 68.1 - 9.62$	☐
24	$22 \overline{) 7128}$	(2 marks) ☐
25	$733\,268 + 92 + 3785 =$	☐
26	$42 \overline{) 7434}$	(2 marks) ☐
27	$\begin{array}{r} 376 \\ \times 59 \\ \hline \end{array}$	(2 marks) ☐

Total marks

/30

How well did you do?
Colour the numbers of the questions you got correct.

± with correct place value	18	23	25											
- with zeros	16	20												
÷ or x by 10, 100 or 1000	4	7	12											
Long x and long ÷	24	26	27											
Fractions	9	10	13											
Missing numbers	1	2	4	6	8	18	20	21						
Brackets	14	19	22											
+	8	10	13	14	19	22	25							
-	2	14	16	18	20	23								
x	3	9	11	12	15	19	27							
÷	1	4	5	6	7	9	17	21	22	24	26			

Spring Test 1

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
- Finding fractions of amounts
- Missing number calculations, including balanced calculations, with all four operations



New: Calculations with brackets

A teaching suggestion

- Step 1** Display $2 \times 3 + 4 =$ and work through together:
 $2 \times 3 + 4 = 6 + 4 = 10$
- Step 2** Now display $2 \times (3 + 4) =$ and discuss how this is similar and different to the first sum.
- Step 3** Explain that the brackets are like two arms held up, pointing inwards and saying: 'Do me first!'. Get the children to raise their arms and call out: 'Do me first!'
- Step 4** Look back at $2 \times (3 + 4) =$ and agree that the brackets are saying: 'Do me first!'. So do this part of the calculation first: $2 \times (3 + 4) = 2 \times 7 = 14$
- Step 5** Work through lots of examples with the children, and then encourage them to work with a partner before trying the calculations independently.

Question number	Question	Answer	Marks	Related test
1	$\square \times 6 = 24$	4	1	Y4 Autumn Test 3, Y4 Spring Test 4
2	$1 = 0.4 + \square$	0.6	1	Y5 Summer Test 4
3	$5^2 = \square$	25	1	Y5 Autumn Test 4
4	$320 \times \square = 3200$	10	1	Y5 Autumn Test 5, Y4 Autumn Test 3
5	$\square = 7534 \div 4$	1883 r2	1	Y5 Autumn Test 6
6	$64 = \square^2$	8	1	Y5 Autumn Test 4
7	$643.1 \div 10 = \square$	64.31	1	Y5 Spring Test 2
8	$7 + 6 = \square - 5$	18	1	Y6 Autumn Test 4
9	$\square = \frac{5}{6}$ of 48	40	1	Y6 Autumn Test 3
10	$\frac{1}{4} + \frac{5}{12} = \square$	$\frac{8}{12}$ (or equiv)	1	Y5 Spring Test 6
11	$6^3 = \square$	216	1	Y5 Spring Test 1
12	$78.341 \times 1000 = \square$	78 341	1	Y5 Spring Test 2
13	$\frac{7}{8} + \frac{3}{4} = \square$	$1\frac{5}{8}$ (or equiv)	1	Y6 Autumn Test 2
14	$9 - (5 + 2) = \square$	2	1	Y6 Spring Test 1
15	$6285 \times 9 = \square$	56 565	1	Y5 Spring Test 3
16	$6001 - 3125 = \square$	2876	1	Y5 Autumn Test 3
17	$4655 \div 7 = \square$	665	1	Y5 Spring Test 5
18	$48.7 = 3.48 + \square$	45.22	1	Y6 Autumn Test 5, Y3 Autumn Test 1
19	$\square = 3 \times (4 + 2)$	18	1	Y6 Spring Test 1
20	$900 - \square = 642$	258	1	Y5 Autumn Test 3, Y3 Autumn Test 1
21	$7056 = \square \times 8$	882	1	Y5 Spring Test 5, Y4 Autumn Test 3
22	$20 \div (4 + 1) = \square$	4	1	Y6 Spring Test 1
23	$\square = 68.1 - 9.62$	58.48	1	Y6 Autumn Test 5
24	$7128 \div 22 = \square$	324	2*	Y6 Autumn Test 6
25	$733\,268 + 92 + 3785 = \square$	737 145	1	Y5 Spring Test 4
26	$7434 \div 42 = \square$	177	2*	Y6 Autumn Test 6
27	$376 \times 59 = \square$	22 184	2*	Y6 Autumn Test 1
Total marks			30	

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

Spring Test 2

Teacher guidance

Skills and knowledge needed for this test:

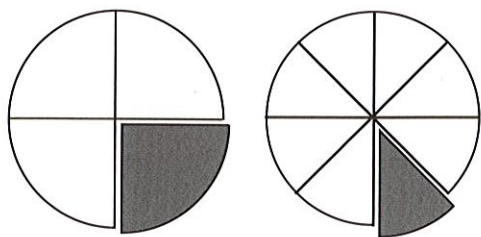
- Addition and subtraction of two numbers with more than four digits
- Addition and subtraction of whole numbers and mixed decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Complements of 1
- Square and cube numbers
- Multiplication and division of whole numbers 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
- Finding fractions of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets



New: Multiplication of pairs of simple fractions

A teaching suggestion

- Step 1** Cut one circle into quarters and another into eighths. Display $\frac{1}{2} \times \frac{1}{4} =$



- Step 2** Explain that 'of' and '×' have the same meaning, so $\frac{1}{2} \times \frac{1}{4} = \frac{1}{2}$ of $\frac{1}{4}$.

- Step 3** Show the children that to find half of a quarter you need to cut the quarter in half. Compare this 'half of a quarter' with the eighths, and agree that they match. $\frac{1}{2}$ of $\frac{1}{4} = \frac{1}{8}$ and $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$

- Step 4** Repeat with $\frac{1}{3} \times \frac{1}{2} =$ by cutting a half into three parts, which gives one sixth: $\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$.

- Step 5** Work through lots of examples with the children until they confidently multiply the digits, understanding why they do so. Allow them to work with a partner before trying the calculations independently.

- Step 6** This work can be extended to multiples of fractions (e.g. $\frac{1}{2} \times \frac{3}{4} =$).

Question number	Question	Answer	Marks	Related test
1	$1 - 0.7 = \square$	0.3	1	Y5 Summer Test 4
2	$\square = 610 \times 1000$	610 000	1	Y5 Autumn Test 5
3	$2^3 = \square$	8	1	Y5 Spring Test 1
4	$4835 \times 3 = \square$	14 505	1	Y5 Spring Test 3
5	$\square^2 = 9$	3	1	Y5 Autumn Test 4
6	$8391 \div 7 = \square$	1198 r5	1	Y5 Autumn Test 6
7	$9^2 = \square$	81	1	Y5 Autumn Test 4
8	$63.2 \times 10 = \square$	632	1	Y5 Spring Test 2
9	$\frac{3}{5} - \frac{1}{15} = \square$	$\frac{8}{15}$ (or equiv)	1	Y5 Spring Test 6
10	$2 \times 9 = \square + 10$	8	1	Y6 Autumn Test 4
11	$\frac{14}{6} - \frac{1}{2} = \square$	$1\frac{5}{6}$ (or equiv)	1	Y6 Autumn Test 2
12	$\square = \frac{1}{4} \times \frac{1}{2}$	$\frac{1}{8}$ (or equiv)	1	Y6 Spring Test 2
13	$800 - 423 = \square$	377	1	Y5 Autumn Test 3
14	$\frac{3}{4}$ of 120 = $\square$	90	1	Y6 Autumn Test 3
15	$\square = 6.25 \div 100$	0.0625	1	Y5 Spring Test 2
16	$\frac{1}{3} \times \frac{1}{4} = \square$	$\frac{1}{12}$ (or equiv)	1	Y6 Spring Test 2
17	$5203 \div 9 = \square$	578 r1	1	Y5 Spring Test 5
18	$(20 - 4) \div 4 = \square$	4	1	Y6 Spring Test 1
19	$6007 - \square = 2308$	3699	1	Y5 Autumn Test 3, Y3 Autumn Test 1
20	$\frac{3}{5} \times \frac{1}{2} = \square$	$\frac{3}{10}$ (or equiv)	1	Y6 Spring Test 2
21	$75 + \square = 5110$	5035	1	Y5 Spring Test 4, Y3 Autumn Test 1
22	$6 \times (5 - 2) = \square$	18	1	Y6 Spring Test 1
23	$8105 = \square \times 5$	1621	1	Y5 Spring Test 5, Y4 Autumn Test 3
24	$5332 \div \square = 4$	1333	1	Y5 Spring Test 5, Y4 Autumn Test 3
25	$752\,945 - 86\,582 = \square$	666 363	1	Y5 Spring Test 4
26	$9906 \div 26 = \square$	381	2*	Y6 Autumn Test 6
27	$26.8 + 8.68 + 14 = \square$	49.48	1	Y6 Autumn Test 5
28	$723 \times 86 = \square$	62 178	2*	Y6 Autumn Test 1
Total marks		30		

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

Spring Test 2

Name: Class: Date:

1	$1 - 0.7 =$	☐
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2	$= 610 \times 1000$	☐
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3	$2^3 =$	☐
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4	$4835 \times 3 =$	☐
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5	$^2 = 9$	☐
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6	$8391 \div 7 =$	☐
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7	$9^2 =$	☐
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8	$63.2 \times 10 =$	☐
----------	---	--------------------------

9	$\frac{3}{5} - \frac{1}{15} =$	☐
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10	$2 \times 9 =$ $+ 10$	☐
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11	$\frac{14}{6} - \frac{1}{2} =$	☐
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12	$= \frac{1}{4} \times \frac{1}{2}$	☐
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13	$800 - 423 =$	☐
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14	$\frac{3}{4}$ of 120 =	☐
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15	$= 6.25 \div 100$	☐
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16	$\frac{1}{3} \times \frac{1}{4} =$	☐
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Spring Test 2 (continued)

17	$9 \overline{) 5203}$	
18	$(20 - 4) \div 4 =$	
19	$6007 -$ $= 2308$	
20	$\frac{3}{5} \times \frac{1}{2} =$	
21	$75 +$ $= 5110$	
22	$6 \times (5 - 2) =$	
23	$8105 =$ $\times 5$	
24	$5332 \div$ $= 4$	
25	$752\,945 - 86\,582 =$	
26	$26 \overline{) 9906}$	(2 marks)
27	$26.8 + 8.68 + 14 =$	
28	$\begin{array}{r} 723 \\ \times 86 \\ \hline \end{array}$	(2 marks)

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

± with correct place value	21	25	27											
– with zeros	13	19												
÷ or x by 10, 100 or 1000	2	8	15											
Long x and long ÷	26	28												
Fractions	9	11	12	14	16	20								
Missing numbers	5	10	19	21	23	24								
Brackets	18	22												
+	27													
–	1	9	10	11	13	18	19	21	22	25				
x	2	3	4	7	8	10	12	14	16	20	22	28		
÷	5	6	14	15	17	18	23	24	26					

Spring Test 3

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: Multiplication and division of decimals to three decimal places by 10, 100 or 1000

A teaching suggestion

Step 1 Tell the children that they are going to learn about multiplication and division of numbers by 10, 100 and 1000. It is helpful to have a decimal point in a fixed position and digit cards that can be moved to illustrate the method.

Step 2 Agree that, when multiplying by 10, 100 and 1000, the digits in the number move to the left, as the answer is bigger than the original number. When dividing by 10, 100 and 1000, the digits in the number move to the right to give an answer that is smaller than the original number.

Step 3 Display $1346 \div 1000$. Establish that the number will become 1000 times smaller. This means that the digits in the number move three columns to the right.
Move 1 = 134.6 Move 2 = 13.46 Move 3 = 1.346

Th HTO . t h th becomes Th HTO . t h th
1 3 4 6 1 . 3 4 6

Step 4 Display $5.6 \div 100$. Establish that there are two moves and the division sign means the digits move to the right to make the number smaller.
Move 1 = 0.56 Move 2 = 0.056

Th HTO . t h th becomes Th HTO . t h th
5 . 6 0 . 0 5 6

Step 5 Complete lots of examples with the children, and then allow them to work with a partner to complete similar examples before trying the work independently.

Question number	Question	Answer	Marks	Related test
1	$1^2 = \square$	1	1	Y5 Autumn Test 4
2	$0.1 = \square - 0.9$	1	1	Y5 Summer Test 4
3	$\square \times 12 = 108$	9	1	Y4 Autumn Test 3, Y4 Summer Test 2
4	$900 \times \square = 90\,000$	100	1	Y5 Autumn Test 5, Y4 Autumn Test 3
5	$144 = \square^2$	12	1	Y5 Autumn Test 4
6	$3408 \div 9 = \square$	378 r6	1	Y5 Autumn Test 6
7	$\square = 2176 \times 6$	13 056	1	Y5 Spring Test 3
8	$\frac{1}{6} + \frac{5}{12} = \square$	$\frac{7}{12}$ (or equiv)	1	Y5 Spring Test 6
9	$13 + 15 = \square \times 4$	7	1	Y6 Autumn Test 4
10	$9.8165 \times 100 = \square$	981.65	1	Y6 Spring Test 3
11	$\frac{15}{10} + \frac{4}{5} = \square$	$2\frac{3}{10}$ (or equiv)	1	Y6 Autumn Test 2
12	$\square = \frac{3}{8}$ of 40	15	1	Y6 Autumn Test 3
13	$\frac{1}{5} \times \frac{1}{3} = \square$	$\frac{1}{15}$ (or equiv)	1	Y6 Spring Test 2
14	$4^3 = \square$	64	1	Y5 Spring Test 1
15	$139.652 \div 10 = \square$	13.9652	1	Y6 Spring Test 3
16	$9004 - 5119 = \square$	3885	1	Y5 Autumn Test 3
17	$8574 \div 6 = \square$	1429	1	Y5 Spring Test 5
18	$\square = 4 \times (10 - 5)$	20	1	Y6 Spring Test 1
19	$\frac{1}{6} \times \frac{1}{2} = \square$	$\frac{1}{12}$ (or equiv)	1	Y6 Spring Test 2
20	$600 - \square = 162$	438	1	Y5 Autumn Test 3, Y3 Autumn Test 1
21	$7458 + 29815 + 67 = \square$	37 340	1	Y5 Spring Test 4
22	$35.92 - 6.741 = \square$	29.179	1	Y6 Autumn Test 5
23	$(30 - 19) \times 8 = \square$	88	1	Y6 Spring Test 1
24	$4 \times \square = 7132$	1783	1	Y5 Spring Test 5, Y4 Autumn Test 3
25	$\square \div 8 = 632$	5056	1	Y5 Spring Test 3, Y4 Autumn Test 3
26	$71.7 = \square - 8.351$	80.051	1	Y6 Autumn Test 5, Y3 Autumn Test 1
27	$8531 \div 19 = \square$	449	2*	Y6 Autumn Test 6
28	$483 \times 37 = \square$	17 871	2*	Y6 Autumn Test 1
Total marks			30	

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

Spring Test 3

Name: _____ **Class:** _____ **Date:** _____

1	$1^2 =$	☐
2	$0.1 =$ $- 0.9$	☐
3	$\times 12 = 108$	☐
4	$900 \times$ $= 90\,000$	☐
5	$144 =$ 2	☐
6	$3408 \div 9 =$	☐
7	$= 2176 \times 6$	☐
8	$\frac{1}{6} + \frac{5}{12} =$	☐
9	$13 + 15 =$ $\times 4,$	☐
10	$9.8165 \times 100 =$	☐
11	$\frac{15}{10} + \frac{4}{5} =$	☐
12	$= \frac{3}{8}$ of 40	☐
13	$\frac{1}{5} \times \frac{1}{3} =$	☐
14	$4^3 =$	☐
15	$139.652 \div 10 =$	☐
16	$9004 - 5119 =$	☐

Spring Test 3 (continued)

17	$6 \overline{) 8574}$	
18	$= 4 \times (10 - 5)$	
19	$\frac{1}{6} \times \frac{1}{2} =$	
20	$600 -$ $= 162$	
21	$7458 + 29815 + 67 =$	
22	$35.92 - 6.741 =$	
23	$(30 - 19) \times 8 =$	
24	$4 \times$ $= 7132$	
25	$\div 8 = 632$	
26	$71.7 =$ $- 8.351$	
27	$19 \overline{) 8531}$	(2 marks)
28	$\begin{array}{r} 483 \\ \times 37 \\ \hline \end{array}$	(2 marks)

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

$\pm$ with correct place value	21	22	26									
– with zeros	16	20										
$\div$ or $\times$ by 10, 100 or 1000	4	10	15									
Long $\times$ and long $\div$	27	28										
Fractions	8	11	12	13	19							
Missing numbers	2	3	4	5	9	20	24	25	26			
Brackets	18	23										
+	2	8	9	11	21							
–	16	18	20	22	23	26						
$\times$	1	7	10	12	13	14	18	19	23	25	28	
$\div$	3	4	5	6	9	12	15	17	24	27		

Spring Test 4

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: Long multiplication of up to four digits by a two-digit number

A teaching suggestion

Step 1 Display:

$$\begin{array}{r} 3683 \\ \times 34 \\ \hline \end{array}$$

Step 2 Explain that the children are going to extend the formal method for long multiplication, and remind them that it is like doing three calculations but only having to write one!

Step 3 Demonstrate that you start by multiplying by the ones for the first calculation, so $4 \times 3683 = 14\,732$.

$$\begin{array}{r} 3683 \\ \times 34 \\ \hline 14732 \\ 231 \\ \hline \end{array}$$

Step 4 Explain that the second calculation is multiplying by the tens. Emphasise that you are multiplying by 30 (not 3), so $3683 \times 30 = 110\,490$.

$$\begin{array}{r} 3683 \\ \times 34 \\ \hline 14732 \\ 110490 \\ \hline 22 \\ \hline \end{array}$$

Step 5 Next, demonstrate the third calculation, where the answers to the other two parts are added together, so $14\,732 + 110\,490 = 125\,222$.

$$\begin{array}{r} 3683 \\ \times 34 \\ \hline 14732 \\ 110490 \\ \hline 125222 \\ \hline \end{array}$$

Step 6 Work through lots of examples with the children, and then let them work with a partner before trying the calculations independently.

Question number	Question	Answer	Marks	Related test
1	$0.3 + \square = 1$	0.7	1	Y5 Summer Test 4
2	$\square = 70 \times 100$	7000	1	Y5 Autumn Test 5
3	$4^2 = \square$	16	1	Y5 Autumn Test 4
4	$11 = \square \div 12$	132	1	Y4 Autumn Test 3, Y4 Summer Test 2
5	$8418 \div 5 = \square$	1683 r3	1	Y5 Autumn Test 6
6	$49 = \square^2$	7	1	Y5 Autumn Test 4
7	$19 - \square = 30 \div 2$	4	1	Y6 Autumn Test 4
8	$5455 \times 7 = \square$	38 185	1	Y5 Spring Test 3
9	$\frac{3}{14} - \frac{1}{7} = \square$	$\frac{1}{14}$ (or equiv)	1	Y5 Spring Test 6
10	$4.8652 \times 100 = \square$	486.52	1	Y6 Spring Test 3
11	$\square = 10^3$	1000	1	Y5 Spring Test 1
12	$\frac{1}{3} \times \frac{1}{10} = \square$	$\frac{1}{30}$ (or equiv)	1	Y6 Spring Test 2
13	$(7 + 3) \times 5 = \square$	50	1	Y6 Spring Test 1
14	$\frac{2}{3}$ of 24 = $\square$	16	1	Y6 Autumn Test 3
15	$\frac{11}{4} - \frac{1}{12} = \square$	$2\frac{8}{12}$ (or equiv)	1	Y6 Autumn Test 2
16	$\frac{2}{5} \times \frac{1}{5} = \square$	$\frac{2}{25}$ (or equiv)	1	Y6 Spring Test 2
17	$\square = 8000 - 4219$	3781	1	Y5 Autumn Test 3
18	$645\,283 - 4395 = \square$	640 888	1	Y5 Spring Test 4
19	$9165 \div 5 = \square$	1833	1	Y5 Spring Test 5
20	$373 \times 94 = \square$	35 062	2*	Y6 Autumn Test 1
21	$6 \times \square = 4656$	776	1	Y5 Spring Test 5, Y4 Autumn Test 3
22	$438.7 + 3.86 + 5.9 = \square$	448.46	1	Y6 Autumn Test 5
23	$7003 - \square = 2885$	4118	1	Y5 Autumn Test 3, Y3 Autumn Test 1
24	$7 = 1904 \div \square$	272	1	Y5 Spring Test 5, Y4 Autumn Test 3
25	$\square + 936 = 14\,825$	13 889	1	Y6 Autumn Test 5, Y3 Autumn Test 1
26	$6732 \div 17 = \square$	396	2*	Y6 Autumn Test 6
27	$2794 \times 75 = \square$	209 550	2*	Y6 Spring Test 4
Total marks			30	

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

Spring Test 4

Name:

Class:

Date:

1	$0.3 + \boxed{} = 1$	☐
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2	$\boxed{} = 70 \times 100$	☐
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3	$4^2 = \boxed{}$	☐
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4	$11 = \boxed{} \div 12$	☐
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5	$5 \overline{) 8418}$	☐
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6	$49 = \boxed{}^2$	☐
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7	$19 - \boxed{} = 30 \div 2$	☐
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8	$5455 \times 7 = \boxed{}$	☐
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9	$\frac{3}{14} - \frac{1}{7} = \boxed{}$	☐
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10	$4.8652 \times 100 = \boxed{}$	☐
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11	$\boxed{} = 10^3$	☐
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12	$\frac{1}{3} \times \frac{1}{10} = \boxed{}$	☐
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13	$(7 + 3) \times 5 = \boxed{}$	☐
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14	$\frac{2}{3} \text{ of } 24 = \boxed{}$	☐
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15	$\frac{11}{4} - \frac{1}{12} = \boxed{}$	☐
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16	$\frac{2}{5} \times \frac{1}{5} = \boxed{}$	☐
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Spring Test 4 (continued)

17 = $8000 - 4219$ ☐

18 $645\,283 - 4395 =$ ☐

19 $5 \overline{) 9165}$ ☐

20
$$\begin{array}{r} 373 \\ \times 94 \\ \hline \end{array}$$
 (2 marks) ☐

21 $6 \times$ $= 4656$ ☐

22 $438.7 + 3.86 + 5.9 =$ ☐

23 $7003 -$ $= 2885$ ☐

24 $7 = 1904 \div$ ☐

25 $+ 936 = 14\,825$ ☐

26 $17 \overline{) 6732}$ (2 marks) ☐

27
$$\begin{array}{r} 2794 \\ \times 75 \\ \hline \end{array}$$
 (2 marks) ☐

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

$\pm$ with correct place value	18	22	25												
$-$ with zeros	17	23													
$\div$ or $\times$ by 10, 100 or 1000	2	10													
Long $\times$ and long $\div$	20	26	27												
Fractions	9	12	14	15	16										
Missing numbers	1	4	6	7	21	23	24	25							
Brackets	13														
$+$	13	22													
$-$	1	7	9	15	17	18	23	25							
$\times$	2	3	4	8	10	11	12	13	14	16	20	27			
$\div$	5	6	7	14	19	21	24	26							

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	$\frac{2}{9} \text{ of } 36 = \square$	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
Total marks			30	

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

Spring Test 5

Name: _____ Class: _____ Date: _____

1	$6^2 =$	☐
2	$600 \times 100 =$	☐
3	$- 0.5 = 0.5$	☐
4	$6759 \div 8 =$	☐
5	$= 3287 \times 9$	☐
6	$7435 =$ $\times 5$	☐
7	$\frac{1}{2} + \frac{1}{6} =$	☐
8	$\times 5 = 28 + 22$	☐
9	$15 - (3 + 4) =$	☐
10	$\frac{2}{9}$ of 36 =	☐
11	$\frac{1}{4} \times \frac{1}{5} =$	☐
12	10% of 320 =	☐
13	$\frac{2}{3} + \frac{14}{9} =$	☐
14	$7.6341 \div 1000 =$	☐
15	$8346 + 59 + 645\,931 =$	☐
16	³ = 8	☐

Spring Test 5 (continued)

17	5% of 140 =	☐
18	$= 384.2 - 79.56$	☐
19	$5.69 = 12.4 -$	☐
20	$6000 - 3058 =$	☐
21	$4 \overline{) 6356}$	☐
22	$6 = 2154 \div$	☐
23	$8000 -$ $= 5843$	☐
24	$\begin{array}{r} 615 \\ \times 62 \\ \hline \end{array}$	(2 marks) ☐
25	$31 \overline{) 6014}$	(2 marks) ☐
26	$= 15\% \text{ of } 360$	☐
27	$\begin{array}{r} 8629 \\ \times 54 \\ \hline \end{array}$	(2 marks) ☐

Total marks

/30

How well did you do?
Colour the numbers of the questions you got correct.

± with correct place value	15	18	19																
- with zeros	20	23																	
÷ or x by 10, 100 or 1000	2	14																	
Long x and long ÷	24	25	27																
Fractions	7	10	11	13															
Percentages of amounts	12	17	26																
Missing numbers	3	6	8	16	19	22	23												
Brackets	9																		
+	3	7	8	9	13	15													
-	9	18	19	20	23														
x	1	2	5	10	11	17	24	26	27										
÷	4	6	8	10	12	14	16	17	21	22	25	26							

Spring Test 6

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 and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets



New: Division giving the answer to two decimal places

A teaching suggestion

Step 1 Display $137 \div 4$ and then set out the sum for formal division. Explain that the children are going to learn to write remainders as a decimal.

Step 2 First ask: 'How many fours in 1 (hundred)?'. Agree there are none and ask: 'How many fours in 13 (tens)?'. Agree that there are 3 (tens) and 1 left over. Write this in, demonstrating where to write the answers.

$$\begin{array}{r} 3 \\ 4 \overline{) 137} \end{array}$$

Step 3 Now ask: 'How many fours in 17?'. Agree that there are 4 fours and 1 left over. Write in the answer and explain that the remainder will be written as a decimal. Write '.0' after the number and put the remainder 1 by it.

$$\begin{array}{r} 34 \\ 4 \overline{) 137.0} \end{array}$$

Step 4 Demonstrate how to put a decimal point above the answer line too, and continue with the calculation. Fours into 10 go two with 2 left over, which then needs another zero to be inserted. Complete the calculation.

$$\begin{array}{r} 34.25 \\ 4 \overline{) 137.00} \end{array}$$

Step 5 Ask the children for another way to write 0.25 and agree that it is equivalent to $\frac{1}{4}$, so the answer can be written as 34.25 (to two decimal places) or as $34\frac{1}{4}$. **Emphasise that remainders should now be calculated as decimals.**

Step 6 Complete lots of examples with the children, and then encourage them to work with a partner to complete similar examples before trying the work independently.

Question number	Question	Answer	Marks	Related test
1	$11^2 = \square$	121	1	Y5 Autumn Test 4
2	$4 \times \square = 32$	8	1	Y4 Autumn Test 3, Y3 Spring Test 4
3	$0.1 + \square = 1$	0.9	1	Y5 Summer Test 4, Y3 Autumn Test 1
4	$\square \div 100 = 40$	4000	1	Y5 Autumn Test 5, Y4 Autumn Test 3
5	$6 = 24 \div \square$	4	1	Y4 Autumn Test 3, Y4 Spring Test 4
6	$6682 \times 8 = \square$	53 456	1	Y5 Spring Test 3
7	$\square^3 = 64$	4	1	Y5 Spring Test 1
8	$50 - 30 = \square \div 2$	40	1	Y6 Autumn Test 4
9	$\square = 10\% \text{ of } 200$	20	1	Y6 Spring Test 5
10	$\frac{8}{9} - \frac{2}{3} = \square$	$\frac{2}{9}$ (or equiv)	1	Y5 Spring Test 6
11	$25 \div (7 - 2) = \square$	5	1	Y6 Spring Test 1
12	$\frac{3}{10} \times \frac{1}{5} = \square$	$\frac{3}{50}$ (or equiv)	1	Y6 Spring Test 2
13	$0.012 \times 10 = \square$	0.12	1	Y6 Spring Test 3
14	$\frac{2}{7} \text{ of } 70 = \square$	20	1	Y6 Autumn Test 3
15	$\square = \frac{16}{7} - \frac{3}{14}$	$2\frac{1}{14}$ (or equiv)	1	Y6 Autumn Test 2
16	$387 \div 2 = \square$	193.5	1	Y6 Spring Test 6
17	$5000 - 2145 = \square$	2855	1	Y5 Autumn Test 3
18	$4.7 + 26.28 + 158.34 = \square$	189.32	1	Y6 Autumn Test 5
19	$\square = 3960 \div 8$	495	1	Y5 Spring Test 5
20	$273\,485 - 89\,916 = \square$	183\,569	1	Y5 Spring Test 4
21	$8214 = \square \times 3$	2738	1	Y5 Spring Test 5, Y4 Autumn Test 3
22	$674 \div 4 = \square$	168.5	1	Y6 Spring Test 6
23	$15\% \text{ of } 480 = \square$	72	1	Y6 Spring Test 5
24	$\square \div 3 = 784$	2352	1	Y5 Spring Test 3, Y4 Autumn Test 3
25	$1293 = 7000 - \square$	5707	1	Y5 Autumn Test 3, Y3 Autumn Test 1
26	$6187 \div 23 = \square$	269	2*	Y6 Autumn Test 6
27	$2427 \times 88 = \square$	213\,576	2*	Y6 Spring Test 4
28	$7321 \div 8 = \square$	915.125	1	Y6 Spring Test 6
Total marks			30	

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

Spring Test 6

Name: Class: Date:

1	$11^2 =$	☐
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2	$4 \times$ $= 32$	☐
----------	--	--------------------------

3	$0.1 +$ $= 1$	☐
----------	------------------------------------	--------------------------

4	$\div 100 = 40$	☐
----------	--------------------------------------	--------------------------

5	$6 = 24 \div$	☐
----------	------------------------------------	--------------------------

6	$6682 \times 8 =$	☐
----------	--	--------------------------

7	³ $= 64$	☐
----------	--	--------------------------

8	$50 - 30 =$ $\div 2$	☐
----------	---	--------------------------

9	$= 10\% \text{ of } 200$	☐
----------	---	--------------------------

10	$\frac{8}{9} - \frac{2}{3} =$	☐
-----------	--	--------------------------

11	$25 \div (7 - 2) =$	☐
-----------	--	--------------------------

12	$\frac{3}{10} \times \frac{1}{5} =$	☐
-----------	--	--------------------------

13	$0.012 \times 10 =$	☐
-----------	--	--------------------------

14	$\frac{2}{7} \text{ of } 70 =$	☐
-----------	---	--------------------------

15	$= \frac{16}{7} - \frac{3}{14}$	☐
-----------	--	--------------------------

16	$2 \overline{) 387}$	☐
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Spring Test 6 (continued)

17	$5000 - 2145 =$	
18	$4.7 + 26.28 + 158.34 =$	
19	$= 3960 \div 8$	
20	$273\,485 - 89\,916 =$	
21	$8214 =$ $\times 3$	
22	$4 \overline{) 6\,7\,4}$	
23	$15\% \text{ of } 480 =$	
24	$\div 3 = 784$	
25	$1293 = 7000 -$	
26	$23 \overline{) 6\,1\,8\,7}$	(2 marks)
27	$\begin{array}{r} 2\,4\,2\,7 \\ \times \quad 8\,8 \\ \hline \end{array}$	(2 marks)
28	$8 \overline{) 7\,3\,2\,1}$	

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

± with correct place value	18	20																	
– with zeros	17	25																	
÷ or x by 10, 100 or 1000	4	13																	
Long x and long ÷	26	27																	
÷ with decimal remainders	16	22	28																
Fractions	10	12	14	15															
Percentages of amounts	9	23																	
Missing numbers	2	3	4	5	7	8	21	24	25										
Brackets	11																		
+	18																		
–	3	8	10	11	15	17	20	25											
x	1	4	6	8	12	13	14	23	24	27									
÷	2	5	7	9	11	14	16	19	21	22	23	26	28						

Spring Test 6 (continued)

17	$5000 - 2145 =$	
18	$4.7 + 26.28 + 158.34 =$	
19	$= 3960 \div 8$	
20	$273\,485 - 89\,916 =$	
21	$8214 =$ $\times 3$	
22	$4 \overline{) 6\,7\,4}$	
23	$15\% \text{ of } 480 =$	
24	$\div 3 = 784$	
25	$1293 = 7000 -$	
26	$23 \overline{) 6\,1\,8\,7}$	(2 marks)
27	$\begin{array}{r} 2\,4\,2\,7 \\ \times \quad 8\,8 \\ \hline \end{array}$	(2 marks)
28	$8 \overline{) 7\,3\,2\,1}$	

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

± with correct place value	18	20																	
– with zeros	17	25																	
÷ or x by 10, 100 or 1000	4	13																	
Long x and long ÷	26	27																	
÷ with decimal remainders	16	22	28																
Fractions	10	12	14	15															
Percentages of amounts	9	23																	
Missing numbers	2	3	4	5	7	8	21	24	25										
Brackets	11																		
+	18																		
–	3	8	10	11	15	17	20	25											
x	1	4	6	8	12	13	14	23	24	27									
÷	2	5	7	9	11	14	16	19	21	22	23	26	28						

Summer Test 1

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 decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets



New: The order of operations (BIDMAS)

A teaching suggestion

Step 1 Provide a cartoon character and introduce it to the children as 'BIDMAS'. Explain that BIDMAS is going to use his or her name to help them with some tricky calculations.

Step 2 Display the word 'BIDMAS'. Work through the meaning of each letter of the name (brackets, indices, division and multiplication, addition and subtraction), explaining that when a sum has more than one operation this is the order in which they must be completed. Brackets are completed first, then indices, then multiplication and division (in any order) and, lastly, addition and subtraction (again, in any order).

Step 3 Display $3 + 4 \times 3 =$ and then work through the calculation in the order it is written ($3 + 4 \times 3 = 7 \times 3 = 21$), and then in the order according to BIDMAS ($3 + 4 \times 3 = 3 + 12 = 15$). Emphasise that only one of these is correct, and that it is the one solved using BIDMAS.

Step 4 Display:
 $(40 - 4) \div 2^2 + 7 \times 3$ Work through it using BIDMAS.
 $(40 - 4) \div 2^2 + 7 \times 3$ (Do the brackets first ...)
 $= 36 \div 2^2 + 7 \times 3$ (... the indices next ...)
 $= 36 \div 4 + 7 \times 3$ (... then multiplication and division in any order ...)
 $= 9 + 21$ (... then addition and subtraction in any order ...)
 $= 30$ (... and you get the answer.)

Step 5 Complete lots of examples with the children. Then ask them to work with a partner to complete similar examples before trying the work independently. Ensure children understand that if a calculation contains operators of equal precedence they can be done in any order. For example $28 - 35 + 16$ does not mean that 35 must be subtracted from 28 before 16 is added.

Question number	Question	Answer	Marks	Related test
1	$14 \times 0 = \square$	0	1	Y4 Autumn Test 4
2	$7^2 = \square$	49	1	Y5 Autumn Test 4
3	$1 - 0.7 = \square$	0.3	1	Y5 Summer Test 4
4	$210 \times \square = 210\,000$	1000	1	Y5 Autumn Test 5, Y4 Autumn Test 3
5	$7 = 35 \div \square$	5	1	Y4 Autumn Test 3, Y4 Spring Test 6
6	$4896 \div 9 = \square$	544	1	Y5 Spring Test 5
7	$\square \times 10 = 29 + 31$	6	1	Y6 Autumn Test 4
8	$\frac{4}{5} + \frac{1}{10} = \square$	$\frac{9}{10}$ (or equiv)	1	Y5 Spring Test 6
9	$\square = (14 + 8) \div 11$	2	1	Y6 Spring Test 1
10	$\frac{1}{2} \times \frac{1}{3} = \square$	$\frac{1}{6}$ (or equiv)	1	Y6 Spring Test 2
11	$864.233 \div 100 = \square$	8.64233	1	Y6 Spring Test 3
12	$\frac{5}{4} + \frac{5}{8} = \square$	$1\frac{7}{8}$ (or equiv)	1	Y6 Autumn Test 2
13	$6 + 4 \times 2 = \square$	14	1	Y6 Summer Test 1
14	$\frac{5}{8}$ of 32 = $\square$	20	1	Y6 Autumn Test 3
15	$\square = 30\% \text{ of } 120$	36	1	Y6 Spring Test 5
16	$6 \times \square = 8958$	1493	1	Y5 Spring Test 5, Y4 Autumn Test 3
17	$7 + 6 \div (3 \times 2) = \square$	8	1	Y6 Summer Test 1
18	$73648 + 976 - 2785 = \square$	71 839	1	Y6 Summer Test 1, Y5 Spring Test 4
19	$5 = 6480 \div \square$	1296	1	Y5 Spring Test 5, Y4 Autumn Test 3
20	$7005 - \square = 1657$	5348	1	Y5 Autumn Test 3, Y3 Autumn Test 1
21	$585 \div 4 = \square$	146.25	1	Y6 Spring Test 6
22	$\square = 5\% \text{ of } 80$	4	1	Y6 Spring Test 5
23	$6 + 3 \times (3 - 1) = \square$	12	1	Y6 Summer Test 1
24	$17.3 - 9.725 + 8.6 = \square$	16.175	1	Y6 Autumn Test 5, Y6 Summer Test 1
25	$7665 \div 35 = \square$	219	2*	Y6 Autumn Test 6
26	$16 = \square + 2.815$	13.185	1	Y6 Autumn Test 5, Y3 Autumn Test 1
27	$9384 \times 27 = \square$	253 368	2*	Y6 Spring Test 4
28	$872 \div 5 = \square$	174.4	1	Y6 Spring Test 6
Total marks			30	

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

Summer Test 1

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 decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets



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Step 1 Provide a cartoon character and introduce it to the children as 'BIDMAS'. Explain that BIDMAS is going to use his or her name to help them with some tricky calculations.

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Step 3 Display $3 + 4 \times 3 =$ and then work through the calculation in the order it is written ($3 + 4 \times 3 = 7 \times 3 = 21$), and then in the order according to BIDMAS ($3 + 4 \times 3 = 3 + 12 = 15$). Emphasise that only one of these is correct, and that it is the one solved using BIDMAS.

Step 4 Display:
 $(40 - 4) \div 2^2 + 7 \times 3$ Work through it using BIDMAS.
 $(40 - 4) \div 2^2 + 7 \times 3$ (Do the brackets first ...)
 $= 36 \div 2^2 + 7 \times 3$ (... the indices next ...)
 $= 36 \div 4 + 7 \times 3$ (... then multiplication and division in any order ...)
 $= 9 + 21$ (... then addition and subtraction in any order ...)
 $= 30$ (... and you get the answer.)

Step 5 Complete lots of examples with the children. Then ask them to work with a partner to complete similar examples before trying the work independently. Ensure children understand that if a calculation contains operators of equal precedence they can be done in any order. For example $28 - 35 + 16$ does not mean that 35 must be subtracted from 28 before 16 is added.

Question number	Question	Answer	Marks	Related test
1	$14 \times 0 = \square$	0	1	Y4 Autumn Test 4
2	$7^2 = \square$	49	1	Y5 Autumn Test 4
3	$1 - 0.7 = \square$	0.3	1	Y5 Summer Test 4
4	$210 \times \square = 210\,000$	1000	1	Y5 Autumn Test 5, Y4 Autumn Test 3
5	$7 = 35 \div \square$	5	1	Y4 Autumn Test 3, Y4 Spring Test 6
6	$4896 \div 9 = \square$	544	1	Y5 Spring Test 5
7	$\square \times 10 = 29 + 31$	6	1	Y6 Autumn Test 4
8	$\frac{4}{5} + \frac{1}{10} = \square$	$\frac{9}{10}$ (or equiv)	1	Y5 Spring Test 6
9	$\square = (14 + 8) \div 11$	2	1	Y6 Spring Test 1
10	$\frac{1}{2} \times \frac{1}{3} = \square$	$\frac{1}{6}$ (or equiv)	1	Y6 Spring Test 2
11	$864.233 \div 100 = \square$	8.64233	1	Y6 Spring Test 3
12	$\frac{5}{4} + \frac{5}{8} = \square$	$1\frac{7}{8}$ (or equiv)	1	Y6 Autumn Test 2
13	$6 + 4 \times 2 = \square$	14	1	Y6 Summer Test 1
14	$\frac{5}{8}$ of 32 = $\square$	20	1	Y6 Autumn Test 3
15	$\square = 30\% \text{ of } 120$	36	1	Y6 Spring Test 5
16	$6 \times \square = 8958$	1493	1	Y5 Spring Test 5, Y4 Autumn Test 3
17	$7 + 6 \div (3 \times 2) = \square$	8	1	Y6 Summer Test 1
18	$73648 + 976 - 2785 = \square$	71 839	1	Y6 Summer Test 1, Y5 Spring Test 4
19	$5 = 6480 \div \square$	1296	1	Y5 Spring Test 5, Y4 Autumn Test 3
20	$7005 - \square = 1657$	5348	1	Y5 Autumn Test 3, Y3 Autumn Test 1
21	$585 \div 4 = \square$	146.25	1	Y6 Spring Test 6
22	$\square = 5\% \text{ of } 80$	4	1	Y6 Spring Test 5
23	$6 + 3 \times (3 - 1) = \square$	12	1	Y6 Summer Test 1
24	$17.3 - 9.725 + 8.6 = \square$	16.175	1	Y6 Autumn Test 5, Y6 Summer Test 1
25	$7665 \div 35 = \square$	219	2*	Y6 Autumn Test 6
26	$16 = \square + 2.815$	13.185	1	Y6 Autumn Test 5, Y3 Autumn Test 1
27	$9384 \times 27 = \square$	253 368	2*	Y6 Spring Test 4
28	$872 \div 5 = \square$	174.4	1	Y6 Spring Test 6
Total marks			30	

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

Summer Test 1

Name: _____ **Class:** _____ **Date:** _____

1	$14 \times 0 =$	☐
2	$7^2 =$	☐
3	$1 - 0.7 =$	☐
4	$210 \times$ $= 210\,000$	☐
5	$7 = 35 \div$	☐
6	$4896 \div 9 =$	☐
7	$\times 10 = 29 + 31$	☐
8	$\frac{4}{5} + \frac{1}{10} =$	☐
9	$= (14 + 8) \div 11$	☐
10	$\frac{1}{2} \times \frac{1}{3} =$	☐
11	$864.233 \div 100 =$	☐
12	$\frac{5}{4} + \frac{5}{8} =$	☐
13	$6 + 4 \times 2 =$	☐
14	$\frac{5}{8}$ of 32 =	☐
15	$= 30\% \text{ of } 120$	☐
16	$6 \times$ $= 8958$	☐

Summer Test 1 (continued)

17	$7 + 6 \div (3 \times 2) =$		☐	
18	$73\,648 + 976 - 2785 =$		☐	
19	$5 = 6480 \div$		☐	
20	$7005 -$		$= 1657$	☐
21	$4 \overline{) 585}$		☐	
22		$= 5\% \text{ of } 80$	☐	
23	$6 + 3 \times (3 - 1) =$		☐	
24	$17.3 - 9.725 + 8.6 =$		☐	
25	$35 \overline{) 7665}$	(2 marks)	☐	
26	$16 =$		$+ 2.815$	☐
27	$\begin{array}{r} 9384 \\ \times 27 \\ \hline \end{array}$	(2 marks)	☐	
28	$5 \overline{) 872}$		☐	

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

$\pm$ with correct place value	18	24	26																
- with zeros	20																		
$\div$ or x by 10, 100 or 1000	4	11																	
Long x and long $\div$	25	27																	
$\div$ with decimal remainders	21	28																	
Fractions	8	10	12	14															
Percentages of amounts	15	22																	
Missing numbers	4	5	7	16	19	20	26												
Brackets and BIDMAS	9	13	17	18	23	24													
+	7	8	9	12	13	17	18	23	24										
-	3	18	20	23	24	26													
x	1	2	10	13	14	15	17	22	23	27									
$\div$	4	5	6	7	9	11	14	15	16	17	19	21	22	25	26				

Summer Test 2

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 decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets and the order of operations (BIDMAS)



New: Addition and subtraction of fractions with different denominators

A teaching suggestion

- Step 1** Cut one circle into halves and another into thirds. Compare the segments, establishing that halves and thirds do not match.
- Step 2** Display $\frac{1}{2} + \frac{1}{3} =$
- Step 3** Challenge the children to find a way to make this calculation possible, and guide them towards the idea of using equivalent fractions. They already know that halves and thirds will not work, so get them to try matching the half and the third to cut-out quarters of the circle and agree that they do not match. Repeat this with cut-out fifths, again agreeing they do not match. Try with cut-out sixths, and agree that a half is three sixths and a third is two sixths.
- Step 4** Now hold three sixths in one hand and two sixths in the other.

$$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} =$$
- Step 5** The sixths are now straightforward to add, giving $\frac{5}{6}$
Emphasise that, where applicable, the answer should be written as a mixed number, not as an improper fraction
- Step 6** Repeat lots of addition and subtraction examples together using one quarter and one third, one fifth and one half and so on. Encourage the children to work with a partner before working independently.

Question number	Question	Answer	Marks	Related test
1	$702 \times 1 = \square$	702	1	Y4 Autumn Test 6
2	$121 = \square^2$	11	1	Y5 Autumn Test 4
3	$0.8 = \square - 0.2$	1	1	Y5 Summer Test 4
4	$7 \times \square = 49$	7	1	Y4 Autumn Test 3, Y4 Spring Test 6
5	$\square \times 1000 = 53\,000$	53	1	Y5 Autumn Test 5, Y4 Autumn Test 3
6	$\frac{1}{3} - \frac{2}{6} = \square$	0	1	Y5 Spring Test 6
7	$6 = 4200 \div \square$	700	1	Y4 Autumn Test 3, Y4 Summer Test 5
8	$5 \times (12 - 9) = \square$	15	1	Y6 Spring Test 1
9	$60 \div \square = 2 \times 6$	5	1	Y6 Autumn Test 4
10	$\frac{1}{10} \times \frac{3}{4} = \square$	$\frac{3}{40}$ (or equiv)	1	Y6 Spring Test 2
11	$\square = 1.9 \times 1000$	1900	1	Y6 Spring Test 3
12	$\frac{9}{5} - \frac{2}{15} = \square$	$1\frac{10}{15}$ (or equiv)	1	Y6 Autumn Test 2
13	$\frac{3}{5}$ of 35 = $\square$	21	1	Y6 Autumn Test 3
14	$3002 - 1405 = \square$	1597	1	Y5 Autumn Test 3
15	$5 - 2 \times 2 = \square$	1	1	Y6 Summer Test 1
16	$36.45 - 9.788 + 289 = \square$	315.662	1	Y6 Autumn Test 5, Y6 Summer Test 1
17	$\frac{1}{5} + \frac{1}{2} = \square$	$\frac{7}{10}$ (or equiv)	1	Y6 Summer Test 2
18	$6498 = \square \times 9$	722	1	Y5 Spring Test 5, Y4 Autumn Test 3
19	$73\,491 - 523 + 89 = \square$	73\,057	1	Y6 Summer Test 1, Y5 Spring Test 4
20	$7428 \div 5 = \square$	1485.6	1	Y6 Spring Test 6
21	$7 = \square \div 832$	5824	1	Y5 Spring Test 3, Y4 Autumn Test 3
22	$(6 + 2) \times 2^2 = \square$	32	1	Y6 Summer Test 1
23	35% of 60 = $\square$	21	1	Y6 Spring Test 5
24	$\square = \frac{1}{2} + \frac{1}{3}$	$\frac{5}{6}$ (or equiv)	1	Y6 Summer Test 2
25	$8171 \div 4 = \square$	2042.75	1	Y6 Spring Test 6
26	$8448 \div 16 = \square$	528	2*	Y6 Autumn Test 6
27	$\frac{1}{4} + \frac{1}{3} = \square$	$\frac{7}{12}$ (or equiv)	1	Y6 Summer Test 2
28	$3657 \times 91 = \square$	332\,787	2*	Y6 Spring Test 4
Total marks		30		

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

Summer Test 2

Name:

Class:

Date:

1	$702 \times 1 =$	☐
----------	---------------------------------------	--------------------------

2	$121 =$ ²	☐
----------	---	--------------------------

3	$0.8 =$ $- 0.2$	☐
----------	--------------------------------------	--------------------------

4	$7 \times$ $= 49$	☐
----------	--	--------------------------

5	$\times 1000 = 53\,000$	☐
----------	--	--------------------------

6	$\frac{1}{3} - \frac{2}{6} =$	☐
----------	--	--------------------------

7	$6 = 4200 \div$	☐
----------	--------------------------------------	--------------------------

8	$5 \times (12 - 9) =$	☐
----------	--	--------------------------

9	$60 \div$ $= 2 \times 6$	☐
----------	---	--------------------------

10	$\frac{1}{10} \times \frac{3}{4} =$	☐
-----------	--	--------------------------

11	$= 1.9 \times 1000$	☐
-----------	--	--------------------------

12	$\frac{9}{5} - \frac{2}{15} =$	☐
-----------	---	--------------------------

13	$\frac{3}{5}$ of 35 =	☐
-----------	--	--------------------------

14	$3002 - 1405 =$	☐
-----------	--------------------------------------	--------------------------

15	$5 - 2 \times 2 =$	☐
-----------	---	--------------------------

16	$36.45 - 9.788 + 289 =$	☐
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Summer Test 2 (continued)

17	$\frac{1}{5} + \frac{1}{2} =$ 	☐	18	6498 = $\times 9$	☐
19	$73\,491 - 523 + 89 =$ 	☐	20	$5 \overline{) 7428}$	☐
21	$7 =$ $\div 832$	☐	22	$(6 + 2) \times 2^2 =$ 	☐
23	35% of 60 = 	☐	24	 $= \frac{1}{2} + \frac{1}{3}$	☐
25	$4 \overline{) 8171}$	☐	26	$16 \overline{) 8448}$	(2 marks) ☐
27	$\frac{1}{4} + \frac{1}{3} =$ 	☐	28	$\begin{array}{r} 3657 \\ \times 91 \\ \hline \end{array}$	(2 marks) ☐

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

± with correct place value	16	19																	
– with zeros	14																		
÷ or x by 10, 100 or 1000	5	11																	
Long x and long ÷	26	28																	
÷ with decimal remainders	20	25																	
Fractions	6	10	12	13	17	24	27												
Percentages of amounts	23																		
Missing numbers	2	3	4	5	7	9	18	21											
Brackets and BIDMAS	8	15	16	19	22														
+	3	16	17	19	22	24	27												
–	6	8	12	14	15	16	19												
x	1	8	9	10	11	13	15	21	22	23	28								
÷	2	4	5	7	9	13	18	20	23	25	26								

Summer Test 3

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 different denominators
- 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 decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets and the order of operations (BIDMAS)



New: Addition and subtraction of fractions and mixed numbers

A teaching suggestion

Step 1 Display $4\frac{5}{7} + 2\frac{5}{9} =$

Step 2 Explain that the children are going to complete this calculation in three stages.

i) Add the whole numbers. $4 + 2 = 6$

ii) Add the fractions. $\frac{5}{7} + \frac{5}{9} = ?$

Step 3 To complete this calculation we need the fractions to have the same denominator. The easiest way to do this is to find the smallest number that is in both the seven and nine times tables (i.e. the lowest common multiple). Since the lowest common multiple of 7 and 9 is 63, use equivalent fractions:

$$\frac{5}{7} + \frac{5}{9} = \frac{45}{63} + \frac{35}{63} = \frac{80}{63} = 1\frac{17}{63}$$

Step 4 iii) Add the two answers. **Emphasise that the answer must be written as a mixed number.**

$$6 + 1\frac{17}{63} = 7\frac{17}{63}$$

Step 5 Complete lots of examples with the children, and then let them work with a partner before trying independent work.

Question number	Question	Answer	Marks	Related test
1	$8^2 = \square$	64	1	Y5 Autumn Test 4
2	$45 = 5 \times \square$	9	1	Y4 Autumn Test 3, Y2 Spring Test 5
3	$\square + 0.4 = 1$	0.6	1	Y5 Summer Test 4
4	$\frac{5}{12} + \frac{1}{6} = \square$	$\frac{7}{12}$ (or equiv)	1	Y5 Spring Test 6
5	$20 \times 1000 = \square$	20 000	1	Y5 Autumn Test 5
6	$9 = \square \div 8$	72	1	Y4 Autumn Test 3, Y4 Spring Test 2
7	$9173 \times 7 = \square$	64 211	1	Y5 Spring Test 3
8	$\square \times 4 = 3176$	794	1	Y5 Spring Test 5, Y4 Autumn Test 3
9	$(8 - 1) \times (3 + 2) = \square$	35	1	Y6 Spring Test 1
10	$6 \times 6 = \square - 6$	42	1	Y6 Autumn Test 4
11	$\frac{7}{3} + \frac{5}{6} = \square$	$3\frac{1}{6}$ (or equiv)	1	Y6 Autumn Test 2
12	$\square = 0.03 \div 10$	0.003	1	Y6 Spring Test 3
13	$748 + 38\,295 - 6410 = \square$	32 633	1	Y5 Spring Test 4
14	$2\frac{1}{3} + 1\frac{1}{3} = \square$	$3\frac{2}{3}$	1	Y6 Summer Test 3
15	$\frac{7}{8}$ of 64 = $\square$	56	1	Y6 Autumn Test 3
16	$\square \div 4 = 1634$	6536	1	Y5 Spring Test 3, Y4 Autumn Test 3
17	$\frac{1}{2} \times \frac{3}{7} = \square$	$\frac{3}{14}$ (or equiv)	1	Y6 Spring Test 2
18	$248.3 - 9.778 = \square$	238.522	1	Y6 Autumn Test 5
19	$1\frac{3}{4} + \frac{3}{4} = \square$	$2\frac{1}{2}$	1	Y6 Summer Test 3
20	$20 - 3 \times (4 + 2) = \square$	2	1	Y6 Summer Test 1
21	$\square = 15\% \text{ of } 280$	42	1	Y6 Spring Test 5
22	$865 \div 8 = \square$	108.125	1	Y6 Spring Test 6
23	$\frac{1}{2} - \frac{1}{9} = \square$	$\frac{7}{18}$ (or equiv)	1	Y6 Summer Test 2
24	$9000 - \square = 3581$	5419	1	Y5 Autumn Test 3, Y3 Autumn Test 1
25	$\square = \frac{1}{4} + \frac{1}{5}$	$\frac{9}{20}$ (or equiv)	1	Y6 Summer Test 2
26	$4\frac{1}{5} - 2\frac{3}{5} = \square$	$1\frac{3}{5}$ (or equiv)	1	Y6 Summer Test 3
27	$6765 \div 41 = \square$	165	2*	Y6 Autumn Test 6
28	$8477 \times 53 = \square$	449 281	2*	Y6 Spring Test 4
Total marks			30	

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

Summer Test 3

Name: Class: Date:

1

$8^2 =$

☐

2

$45 = 5 \times$

☐

3

$+ 0.4 = 1$

☐

4

$\frac{5}{12} + \frac{1}{6} =$

☐

5

$20 \times 1000 =$

☐

6

$9 =$

$\div 8$

☐

7

$9173 \times 7 =$

☐

8

$\times 4 = 3176$

☐

9

$(8 - 1) \times (3 + 2) =$

☐

10

$6 \times 6 =$

$- 6$

☐

11

$\frac{7}{3} + \frac{5}{6} =$

☐

12

$= 0.03 \div 10$

☐

13

$748 + 38\,295 - 6410 =$

☐

14

$2\frac{1}{3} + 1\frac{1}{3} =$

☐

15

$\frac{7}{8} \text{ of } 64 =$

☐

16

$\div 4 = 1634$

☐

Summer Test 3 (continued)

17	$\frac{1}{2} \times \frac{3}{7} =$	<input style="width: 30px; height: 30px;" type="checkbox"/>
18	$248.3 - 9.778 =$	<input style="width: 30px; height: 30px;" type="checkbox"/>
19	$1\frac{3}{4} + \frac{3}{4} =$	<input style="width: 30px; height: 30px;" type="checkbox"/>
20	$20 - 3 \times (4 + 2) =$	<input style="width: 30px; height: 30px;" type="checkbox"/>
21	= 15% of 280,	<input style="width: 30px; height: 30px;" type="checkbox"/>
22	$8 \overline{) 865}$	<input style="width: 30px; height: 30px;" type="checkbox"/>
23	$\frac{1}{2} - \frac{1}{9} =$	<input style="width: 30px; height: 30px;" type="checkbox"/>
24	$9000 -$ $= 3581$	<input style="width: 30px; height: 30px;" type="checkbox"/>
25	$= \frac{1}{4} + \frac{1}{5}$	<input style="width: 30px; height: 30px;" type="checkbox"/>
26	$4\frac{1}{5} + 2\frac{3}{5} =$	<input style="width: 30px; height: 30px;" type="checkbox"/>
27	$41 \overline{) 6765}$ (2 marks)	<input style="width: 30px; height: 30px;" type="checkbox"/>
28	$\begin{array}{r} 8477 \\ \times 53 \\ \hline \end{array}$ (2 marks)	<input style="width: 30px; height: 30px;" type="checkbox"/>

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

± with correct place value	13	18																	
– with zeros	24																		
÷ or x by 10, 100 or 1000	5	12																	
Long x and long ÷	27	28																	
÷ with decimal remainders	22																		
Fractions	4	11	14	15	17	19	23	25	26										
Percentages of amounts	21																		
Missing numbers	2	3	6	8	10	16	24												
Brackets and BIDMAS	9	13	20																
+	4	9	10	11	13	14	19	20	25										
–	3	9	13	18	20	23	24	26											
x	1	5	6	7	9	10	15	16	17	20	21	28							
÷	2	8	12	15	21	22	27												

Summer Test 4

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 different denominators and mixed numbers
- 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 decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets and the order of operations (BIDMAS)



New: Multiplication of a one-digit number with up to two decimal places by a whole number

A teaching suggestion

- Step 1** Review times tables to 10×10 and explain that these are very important in this activity.
- Step 2** Ask the children to work out 7×8 (56).
- Step 3** Ask the children what are 7 dogs $\times$ 8 (56 dogs). Repeat with other objects.
- Step 4** Now ask the children what are 7 tenths $\times$ 8 (56 tenths). Discuss how to write this as a number (5.6). Display $0.7 \times 8 = 5.6$ and point out that there is one digit after a decimal point in both the question and the answer.
- Step 5** Ask the children what are 7 hundredths $\times$ 8 (56 hundredths). Discuss how to write this as a number (0.56). Display $0.07 \times 8 = 0.56$ and point out that there are two digits after a decimal point in both the question and the answer.
- Step 6** Complete lots of examples with the children, and then allow them to work with a partner to complete similar examples before trying the work independently.

Question number	Question	Answer	Marks	Related test
1	$27 \times 0 = \square$	0	1	Y4 Autumn Test 4
2	$\square - 0.7 = 0.3$	1	1	Y5 Summer Test 4
3	$12^2 = \square$	144	1	Y5 Autumn Test 4
4	$\square \div 10 = 6200$	62 000	1	Y5 Autumn Test 5, Y4 Autumn Test 3
5	$48 \div \square = 4$	12	1	Y4 Autumn Test 3, Y3 Spring Test 4
6	$\frac{1}{2} - \frac{3}{10} = \square$	$\frac{1}{5}$ (or equiv)	1	Y5 Spring Test 6
7	$17 + 7 = 4 \times \square$	6	1	Y6 Autumn Test 4
8	$(14 - 4) \div (7 - 2) = \square$	2	1	Y6 Spring Test 1
9	$34.2983 \times 100 = \square$	3429.83	1	Y6 Spring Test 3
10	$\frac{1}{3} \times \frac{1}{6} = \square$	$\frac{1}{18}$ (or equiv)	1	Y6 Spring Test 2
11	$\square = \frac{5}{2} - \frac{7}{12}$	$1\frac{11}{12}$ (or equiv)	1	Y6 Autumn Test 2
12	$\frac{9}{10}$ of 80 = $\square$	72	1	Y6 Autumn Test 3
13	$1\frac{4}{7} + 2\frac{4}{7} = \square$	$3\frac{8}{7}$ (or equiv)	1	Y6 Summer Test 3
14	$93.4 + 26 - 4.85 = \square$	114.55	1	Y6 Summer Test 1, Y6 Autumn Test 5
15	$\square = 732\,183 - 4468$	727\,715	1	Y5 Spring Test 4
16	$6 + 3^2 \div (7 + 2) = \square$	7	1	Y6 Summer Test 1
17	$3\frac{3}{10} + 1\frac{7}{10} = \square$	$4\frac{10}{10}$ (or equiv)	1	Y6 Summer Test 3
18	$837 \div 4 = \square$	209.25	1	Y6 Spring Test 6
19	$\frac{1}{3} + \frac{1}{5} = \square$	$\frac{8}{15}$ (or equiv)	1	Y6 Summer Test 2
20	$0.02 \times 4 = \square$	0.08	1	Y6 Summer Test 4
21	40% of 250 = $\square$	100	1	Y6 Spring Test 5
22	$\square = 4000 - 2472$	1528	1	Y5 Autumn Test 3
23	$0.1 \times 6 = \square$	0.6	1	Y6 Summer Test 4
24	$1496 = 8 \times \square$	187	1	Y5 Spring Test 5, Y4 Autumn Test 3
25	$9876 \div \square = 6$	1646	1	Y5 Spring Test 5, Y4 Autumn Test 3
26	$9656 \div 34 = \square$	284	2*	Y6 Autumn Test 6
27	$9346 \times 47 = \square$	439\,262	2*	Y6 Spring Test 4
28	$0.07 \times 2 = \square$	0.14	1	Y6 Summer Test 4
Total marks			30	

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

Summer Test 4

Name: Class: Date:

1	$27 \times 0 =$	☐
2	$- 0.7 = 0.3$	☐
3	$12^2 =$	☐
4	$\div 10 = 6200$	☐
5	$48 \div$ $= 4$	☐
6	$\frac{1}{2} - \frac{3}{10} =$	☐
7	$17 + 7 = 4 \times$	☐
8	$(14 - 4) \div (7 - 2) =$	☐
9	$34.2983 \times 100 =$	☐
10	$\frac{1}{3} \times \frac{1}{6} =$	☐
11	$= \frac{5}{2} - \frac{7}{12}$	☐
12	$\frac{9}{10}$ of 80 =	☐
13	$1\frac{4}{7} + 2\frac{4}{7} =$	☐
14	$93.4 + 26 - 4.85 =$	☐
15	$= 732\,183 - 4468$	☐
16	$6 + 3^2 \div (7 + 2) =$	☐

Summer Test 4 (continued)

17 | $3\frac{3}{10} - 1\frac{7}{10} =$

☐

$$18 \quad 4 \overline{) 837}$$



19 $\left| \frac{1}{3} + \frac{1}{5} = \right.$



20	$0.02 \times 4 =$
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☐

21 | 40% of 250 =



22		$= 4000 - 2472$
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☐

23 | $0.1 \times 6 =$



24 $1496 = 8 \times$

☐

25	$9876 \div$	$= 6$
-----------	-------------	-------



26 34 9 6 5 6



$$\begin{array}{r} 9346 \\ 27 \times 47 \end{array}$$



28 $0.07 \times 2 =$



Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

$\pm$ with correct place value	14	15												
– with zeros	22													
$\div$ or $\times$ by 10, 100 or 1000	4	9												
Long $\times$ and long $\div$	26	27												
$\div$ with decimal remainders	18													
Fractions	6	10	11	12	13	17	19							
Percentages of amounts	21													
Missing numbers	2	4	5	7	24	25								
Brackets and BIDMAS	8	14	16											
+	2	7	13	14	16	19								
–	6	8	11	14	15	17	22							
$\times$	1	3	4	9	10	12	16	20	21	23	27	28		
$\div$	5	7	8	12	16	18	21	24	25	26				

Summer 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 different denominators and mixed numbers
- Complements of 1
- Multiplication and division of whole numbers and decimals by 10, 100 and 1000
- Multiplication of a one-digit number with up to two decimal places by a whole number
- Formal written method for short multiplication and short division with decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions
- Finding fractions and percentages of amounts
- Square and cube numbers
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets and the order of operations (BIDMAS)



New: Division of proper fractions by a whole number

A teaching suggestion

- Step 1** Display $\frac{1}{3} \div 2 = \square$ and a circle cut into thirds. Hold up one third and ask the children to discuss what they are being asked to do. Agree that they are being asked to cut the third into two pieces.
- Step 2** Cut the third into two pieces and agree that this is a sixth. Match up to a circle cut into sixths to demonstrate that this is correct.
- Step 3** Write $\frac{1}{3} \div 2 = \frac{1}{6}$ and emphasise the relationship of $3 \times 2 = 6$.
- Step 4** Display $\frac{2}{5} \div 3 = \square$ and a circle cut into fifths. Hold up two fifths and ask the children to discuss what they are being asked to do. Agree that they are being asked to cut each fifth into three equal pieces.
- Step 5** Cut each of the fifths into three equal pieces and agree that these are fifteenths. Match up to a circle cut into fifteenths to demonstrate that this is correct.
- Step 6** Write $\frac{2}{5} \div 3 = \frac{2}{15}$ and emphasise the relationship of $5 \times 3 = 15$.
- Step 7** Complete examples together until the children are confident that they multiply the denominator by the divisor.

Question number	Question	Answer	Marks	Related test
1	$\square = 412 \div 1$	412	1	Y4 Autumn Test 6
2	$72 \div \square = 12$	6	1	Y4 Autumn Test 3, Y4 Summer Test 2
3	$90 \times \square = 9000$	100	1	Y5 Autumn Test 5, Y4 Autumn Test 3
4	$\square + 0.6 = 1$	0.4	1	Y5 Summer Test 4, Y3 Autumn Test 1
5	$10 \times (11 + 5) = \square$	160	1	Y6 Spring Test 1
6	$132 = \square \times 11$	12	1	Y4 Autumn Test 3, Y4 Autumn Test 5
7	$22 + \square = 5 \times 6$	8	1	Y6 Autumn Test 4
8	$\frac{3}{4} + \frac{2}{8} = \square$	1 (or equiv)	1	Y5 Spring Test 6
9	$1622 = 3000 - \square$	1378	1	Y5 Autumn Test 3, Y3 Autumn Test 1
10	$\frac{3}{8} + \frac{3}{2} = \square$	$1\frac{7}{8}$ (or equiv)	1	Y6 Autumn Test 2
11	$1478.264 \div 1000 = \square$	1.478264	1	Y6 Spring Test 3
12	$\frac{2}{5} \times \frac{3}{4} = \square$	$\frac{3}{10}$ (or equiv)	1	Y6 Spring Test 2
13	$\square = \frac{4}{7}$ of 42	24	1	Y6 Autumn Test 3
14	$382 - 4935 + 78\,529 = \square$	73\,976	1	Y6 Summer Test 1, Y5 Spring Test 4
15	$0.3 \times 3 = \square$	0.9	1	Y6 Summer Test 4
16	$\frac{1}{2} + \frac{1}{7} = \square$	$\frac{9}{14}$ (or equiv)	1	Y6 Summer Test 2
17	$40 - (3 + 5^2) \div 4 = \square$	33	1	Y6 Summer Test 1
18	$637.2 - 28.35 + 8.8 = \square$	617.65	1	Y6 Summer Test 1, Y6 Autumn Test 5
19	$713 \div 5 = \square$	142.6	1	Y6 Spring Test 6
20	$\square = \frac{1}{4} \div 2$	$\frac{1}{8}$ (or equiv)	1	Y6 Summer Test 5
21	15% of 900 = $\square$	135	1	Y6 Spring Test 5
22	$4\frac{4}{6} - 3\frac{5}{6} = \square$	$\frac{5}{6}$ (or equiv)	1	Y6 Summer Test 3
23	$0.04 \times 2 = \square$	0.08	1	Y6 Summer Test 4
24	$\frac{1}{2} \div 3 = \square$	$\frac{1}{6}$ (or equiv)	1	Y6 Summer Test 5
25	$3456 \div 27 = \square$	128	2*	Y6 Autumn Test 6
26	$4\frac{3}{9} - 2\frac{2}{9} = \square$	$2\frac{1}{9}$ (or equiv)	1	Y6 Summer Test 3
27	$\frac{2}{7} \div 5 = \square$	$\frac{2}{35}$ (or equiv)	1	Y6 Summer Test 5
28	$2195 \times 58 = \square$	127\,310	2*	Y6 Spring Test 4
Total marks			30	

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

Summer Test 5

Name: **Class:** **Date:**

1	$\square = 412 \div 1$	☐
2	$72 \div \square = 12$	☐
3	$90 \times \square = 9000$	☐
4	$\square + 0.6 = 1$	☐
5	$10 \times (11 + 5) = \square$	☐
6	$132 = \square \times 11$	☐
7	$22 + \square = 5 \times 6$	☐
8	$\frac{3}{4} + \frac{2}{8} = \square$	☐
9	$1622 = 3000 - \square$	☐
10	$\frac{3}{8} + \frac{3}{2} = \square$	☐
11	$1478.264 \div 1000 = \square$	☐
12	$\frac{2}{5} \times \frac{3}{4} = \square$	☐
13	$\square = \frac{4}{7} \text{ of } 42$	☐
14	$382 - 4935 + 78\,529 = \square$	☐
15	$0.3 \times 3 = \square$	☐
16	$\frac{1}{2} + \frac{1}{7} = \square$	☐

Summer Test 5 (continued)

17	$40 - (3 + 5^2) \div 4 =$		☐
18	$637.2 - 28.35 + 8.8 =$		☐
19	$5 \overline{) 713}$		☐
20	$\frac{\quad}{\quad} = \frac{1}{4} \div 2$		☐
21	$15\% \text{ of } 900 =$		☐
22	$4\frac{4}{6} - 3\frac{5}{6} =$		☐
23	$0.04 \times 2 =$		☐
24	$\frac{1}{2} \div 3 =$		☐
25	$27 \overline{) 3456}$	(2 marks)	☐
26	$4\frac{3}{9} + 2\frac{7}{9} =$		☐
27	$\frac{2}{7} \div 5 =$		☐
28	$\begin{array}{r} 2195 \\ \times \quad 58 \\ \hline \end{array}$	(2 marks)	☐

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

$\pm$ with correct place value	14	18											
- with zeros	9												
$\div$ or x by 10, 100 or 1000	3	11											
Long x and long $\div$	25	28											
$\div$ with decimal remainders	19												
Fractions	8	10	12	13	16	20	22	24	26	27			
Percentages of amounts	21												
Missing numbers	2	3	4	6	7	9							
Brackets and BIDMAS	5	14	17	18									
+	5	8	10	14	16	17	18	26					
-	4	7	9	14	17	18	22						
x	5	7	12	13	15	17	21	23	28				
$\div$	1	2	3	6	11	13	17	19	20	21	24	25	27

Summer Test 6

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 different denominators and mixed numbers
- Complements of 1
- Square and cube numbers
- Multiplication and division of whole numbers and decimals by 10, 100 and 1000
- Multiplication of a one-digit number with up to two decimal places by a whole number
- Formal written method for short multiplication and short division with decimal remainders
- Formal written method for long multiplication and long division by a two-digit number
- Multiplication of pairs of simple fractions and division of fractions by a whole number
- Finding fractions and percentages of amounts
- Missing number calculations, including balanced calculations, with all four operations
- Calculations with brackets and the order of operations (BIDMAS)

There are no new skills. This is the end of year test.

Question number	Question	Answer	Marks	Related test
1	$9 \times 0 = \square$	0	1	Y4 Autumn Test 4
2	$\square + 0.9 = 1$	0.1	1	Y5 Summer Test 4, Y3 Autumn Test 1
3	$81 = \square^2$	9	1	Y5 Autumn Test 4
4	$72 \div \square = 9$	8	1	Y4 Autumn Test 3, Y4 Spring Test 2
5	$30 - 20 = \square \div 3$	30	1	Y6 Autumn Test 4
6	$\frac{7}{15} - \frac{2}{5} = \square$	$\frac{1}{15}$ (or equiv)	1	Y5 Spring Test 6
7	$\frac{1}{3} \times \frac{1}{4} = \square$	$\frac{1}{12}$ (or equiv)	1	Y6 Spring Test 2
8	$\square = 5^3$	125	1	Y5 Spring Test 1
9	$(9 - 4) \times (12 - 7) = \square$	25	1	Y6 Spring Test 1
10	$\frac{25}{9} - \frac{4}{3} = \square$	$1\frac{4}{9}$ (or equiv)	1	Y6 Autumn Test 2
11	$3861 = \square \times 9$	429	1	Y5 Spring Test 5, Y4 Autumn Test 3
12	$\frac{5}{9}$ of 63 = $\square$	35	1	Y6 Autumn Test 3
13	$7.32878 \times 1000 = \square$	7328.78	1	Y6 Spring Test 3
14	$6.1 - 8.563 + 175.4 = \square$	172.937	1	Y6 Autumn Test 5, Y6 Summer Test 1
15	$\square = 0.07 \times 3$	0.21	1	Y6 Summer Test 4
16	$4000 - 2393 = \square$	1607	1	Y5 Autumn Test 3
17	$2583 \div 8 = \square$	322.875	1	Y6 Spring Test 6
18	$(2^3 + 4) - 5 \times 2 = \square$	2	1	Y6 Summer Test 1
19	$49\,432 - 8966 + 472 = \square$	40\,938	1	Y6 Summer Test 1, Y5 Spring Test 4
20	$\frac{1}{6} \div 2 = \square$	$\frac{1}{12}$ (or equiv)	1	Y6 Summer Test 5
21	$619 = \square \div 8$	4952	1	Y5 Spring Test 3, Y4 Autumn Test 3
22	$8000 - \square = 4273$	3727	1	Y5 Autumn Test 3, Y3 Autumn Test 1
23	$\frac{1}{5} + \frac{1}{6} = \square$	$\frac{11}{30}$ (or equiv)	1	Y6 Summer Test 2
24	$7686 \div 18 = \square$	427	2*	Y6 Autumn Test 6
25	$\square = 0.6 \times 6$	3.6	1	Y6 Summer Test 4
26	35% of 180 = $\square$	63	1	Y6 Spring Test 5
27	$8\frac{4}{5} - 2\frac{1}{10} = \square$	$6\frac{7}{10}$ (or equiv)	1	Y6 Summer Test 3
28	$8968 \times 79 = \square$	708\,472	2*	Y6 Spring Test 4
Total marks			30	

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

Summer Test 6

Name: _____ Class: _____ Date: _____

1	$9 \times 0 =$	☐
2	$+ 0.9 = 1$	☐
3	$81 =$ ²	☐
4	$72 \div$ $= 9$	☐
5	$30 - 20 =$ $\div 3$	☐
6	$\frac{7}{15} - \frac{2}{5} =$	☐
7	$\frac{1}{3} \times \frac{1}{4} =$	☐
8	$= 5^3$	☐
9	$(9 - 4) \times (12 - 7) =$	☐
10	$\frac{25}{9} - \frac{4}{3} =$	☐
11	$3861 =$ $\times 9$	☐
12	$\frac{5}{9}$ of 63 =	☐
13	$7.32878 \times 1000 =$	☐
14	$6.1 - 8.563 + 175.4 =$	☐
15	$= 0.07 \times 3$	☐
16	$4000 - 2393 =$	☐

Summer Test 6 (continued)

17	$8 \overline{) 2583}$	☐
18	$(2^3 + 4) - 5 \times 2 =$	☐
19	$49432 - 8966 + 472 =$	☐
20	$\frac{1}{6} \div 2 =$	☐
21	$619 =$ $\div 8$	☐
22	$8000 -$ $= 4273$	☐
23	$\frac{1}{5} + \frac{1}{6} =$	☐
24	$18 \overline{) 7686}$	☐ (2 marks)
25	$= 0.6 \times 6$	☐
26	$35\% \text{ of } 180 =$	☐
27	$8\frac{4}{5} - 2\frac{1}{10} =$	☐
28	$\begin{array}{r} 8968 \\ \times 79 \\ \hline \end{array}$	☐ (2 marks)

Total marks

/30

How well did you do?

Colour the numbers of the questions you got correct.

± with correct place value	14	19																	
– with zeros	16	22																	
÷ or x by 10, 100 or 1000	13																		
Long x and long ÷	24	28																	
÷ with decimal remainders	17																		
Fractions	6	7	10	12	20	23	27												
Percentages of amounts	26																		
Missing numbers	2	3	4	5	11	21	22												
Brackets and BIDMAS	9	14	18	19															
+	14	18	19	23															
–	2	5	6	9	10	14	16	18	19	22	27								
x	1	5	7	8	9	12	13	15	18	21	25	26	28						
÷	3	4	11	12	17	20	24	26											