

2016 national curriculum tests

Key stage 2

Mathematics

Paper 1: arithmetic

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
School name						
DfE number						



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Instructions

You **may not** use a calculator to answer any questions in this test.

Questions and answers

You have **30 minutes** to complete this test.

Work as quickly and as carefully as you can.

Put your answer in the box for each question.

All answers should be given as a single value.

For questions expressed as common fractions or mixed numbers, you should give your answers as common fractions or mixed numbers.

If you cannot do a question, **go on to the next one**. You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

Marks

The number under each box at the side of the page tells you the maximum number of marks for each question.

In this test, long division and long multiplication questions are worth **TWO marks each**. You will be awarded **TWO** marks for a correct answer. You may get **ONE** mark for showing a formal method.

All other questions are worth **ONE mark each**.

If you finish before the end, **go back and check your work**.



E 0 0 0 6 0 A 0 3 2 0

1

$987 + 100 =$

	9	8	7
+	1	0	0
<hr/>			
1	0	8	7

1087



1 mark

2

$46 + 304 =$

	3	0	4
+		4	6
<hr/>			
	3	5	0
		1	

350



1 mark

3

$326 \div 1 =$

	3	2	6
1	3	2	6

or

Any number divided
by 1 stays the same

326



1 mark



4

$$468 - 9 =$$

$$\begin{array}{r} 468 \\ - 9 \\ \hline 459 \end{array}$$

459

1 mark

5

$$1221 = 936 + 285$$

$$\begin{array}{r} 936 \\ + 285 \\ \hline 1221 \\ \hline 111 \end{array}$$

1 mark

6

$$95 \div 5 =$$

$$\begin{array}{r} 19 \\ 5 \overline{) 95} \\ \underline{5} \\ 45 \\ \underline{45} \\ 0 \end{array}$$

1	5	9	45
2	10	10	50
3	15		
4	20		
5	25		
6	30		
7	35		
8	40		

19

1 mark



E 0 0 0 6 0 A 0 5 2 0

7

$$89,994 + 7,643 =$$

$$\begin{array}{r} 89994 \\ + 7643 \\ \hline 97637 \end{array}$$

97,637



1 mark

8

$$\boxed{405} = 435 - 30$$

$$\begin{array}{r} 435 \\ - 30 \\ \hline 405 \end{array}$$



1 mark

9

$$96 \div 4 =$$

$$\begin{array}{r} 24 \\ 4 \overline{)96} \end{array}$$

24



1 mark



10

$879 \times 3 =$

$$\begin{array}{r}
 879 \\
 \times 3 \\
 \hline
 2637 \\
 \hline
 \end{array}$$

2,637

1 mark

11

$71 \times 8 =$

$$\begin{array}{r}
 71 \\
 \times 8 \\
 \hline
 568 \\
 \hline
 \end{array}$$

568

1 mark

12

$50 \times 70 =$

$$\begin{array}{r}
 70 \\
 \times 50 \\
 \hline
 3500 \\
 \hline
 3500 \\
 \hline
 \end{array}$$

3500

1 mark



E 0 0 0 6 0 A 0 7 2 0

13

$100 \times 412 =$

$100 \times 412 = 41200$

When multiplying a whole number
by 100, add two zeros
to the number.

41200



1 mark

14

$3.005 + 6.12 =$

$$\begin{array}{r} 3.005 \\ + 6.120 \\ \hline 9.125 \end{array}$$

Always line up the
decimal point.

9.125



1 mark

15

$486 \div 3 =$

$$\begin{array}{r} 162 \\ 3 \overline{)486} \end{array}$$

162



1 mark



16

$15.98 + 26.314 =$

$$\begin{array}{r} 26.314 \\ + 15.980 \\ \hline 42.294 \\ \text{1 1} \end{array}$$

42.294

1 mark

17

$125.48 - 72.3 =$

$$\begin{array}{r} 0 \\ \times 125.48 \\ - 72.30 \\ \hline 53.18 \end{array}$$

53.18

1 mark

18

$122,456 - 11,999 =$

$$\begin{array}{r} 122,456 \\ - 11,999 \\ \hline 110,457 \end{array}$$

110457

1 mark



E 0 0 0 6 0 A 0 9 2 0

19

$3^2 + 10 =$

$3^2 = 3 \times 3 = 9$

$9 + 10 = 19$

19



1 mark

20

$0.9 \div 10 =$

0.9 move digits 1 place to the right

0.09

0.09



1 mark

21

$4 - 1.15 =$

$$\begin{array}{r} 3.9 \\ 4.00 \\ - 1.15 \\ \hline 2.85 \end{array}$$

If taking a decimal from a whole number, give the whole number a decimal point.

2.85



1 mark



22

$$1,320 \div 12 =$$

				1	1	0		1	2	9	1	0	8				
1	2	1	3	2	0			2	2	4	10	1	2	0			
		-	1	2	0			3	3	6	11	1	3	2			
				1	2			4	4	8	12	1	4	4			
					0			5	6	0							
								6	7	2							
								7	8	4							
								8	9	6							

110

1 mark

23

$$\begin{array}{r} 71 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} 426 \\ + 2840 \\ \hline 3266 \end{array}$$

Remember to use the zero as a place holder when multiplying by the tens digit.

Show your method

3266

2 marks



24

$$\frac{4}{7} + \frac{5}{7} =$$

$$\frac{4}{7} + \frac{5}{7} = \frac{9}{7} \text{ or } 1\frac{2}{7}$$

$$\frac{9}{7} \text{ or } 1\frac{2}{7}$$



1 mark

25

$$20\% \text{ of } 1,800 =$$

$$10\% \text{ of } 1800 = 1800 \div 10$$

$$10\% \text{ of } 1800 = 180$$

$$20\% = 2 \times 180 = 360$$



1 mark

26

$$15 \times 6.1 =$$

$$\begin{array}{r} 6.1 \\ \times 15 \\ \hline 30.5 \\ + 61.0 \\ \hline 91.5 \end{array}$$

$$91.5$$



1 mark



27

$$\frac{3}{10} - \frac{1}{20} =$$

$$\frac{3 \times 2}{10 \times 2} - \frac{1}{20}$$

$$\frac{6}{20} - \frac{1}{20} = \frac{5}{20}$$

Remember to find a common denominator.

$$\frac{5}{20} = \frac{1}{4}$$

$$\frac{1}{4}$$

1 mark

28

$$\begin{array}{r} 29 \overline{) 025} \\ \underline{58} \\ 145 \\ \underline{145} \\ 0 \end{array}$$

$$\begin{array}{r} 29 \\ \underline{58} \\ 87 \\ \underline{116} \\ 145 \\ \underline{145} \\ 0 \end{array}$$

Show your method

$$25$$

2 marks



E 0 0 0 6 0 A 0 1 3 2 0

29

$15\% \times 440 =$

$$\begin{array}{l} 10\% \text{ of } 440 = 44 \\ 5\% \text{ of } 440 = 22 \end{array}$$

$$\begin{array}{r} 44 \\ + 22 \\ \hline 66 \end{array}$$

66

1 mark

30

$$\begin{array}{r} 6574 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 6574 \\ + 197220 \\ \hline 203794 \end{array}$$

Show
your
method

203794

2 marks



31

$$1\frac{4}{5} + \frac{3}{10} =$$

$$1\frac{4^{\times 2}}{5^{\times 2}} + \frac{3}{10}$$

$$1\frac{8}{10} + \frac{3}{10} = 1\frac{11}{10} = 2\frac{1}{10}$$

$$2\frac{1}{10}$$

1 mark

32

$$\begin{array}{r} 43 \\ - \quad 17 \\ \hline 26 \end{array}$$

$$\begin{array}{r} 43 \\ 86 \\ 129 \\ 172 \\ 215 \\ 258 \end{array}$$

Show
your
method

$$26$$

2 marks



E 0 0 0 6 0 A 0 1 5 2 0

33

$$\frac{3}{5} \div 3 =$$

$$\frac{3}{5} \div 3 = \frac{3}{5} \times \frac{1}{3} = \frac{3}{15} = \frac{1}{5}$$

1 mark

34

$$\frac{2}{5} \times 140 =$$

$$\frac{2}{5} \times \frac{140}{1} = \frac{280}{5}$$

$$5 \overline{)280} \begin{array}{r} 56 \end{array}$$

1 mark



35

$$1\frac{1}{4} - \frac{1}{3} =$$

$$\begin{array}{r} 1\frac{1}{4} \times 3 \quad 1 \times 4 \\ \frac{1}{4} \times 3 \quad \frac{1}{3} \times 4 \\ \frac{3}{12} - \frac{4}{12} \\ \frac{15}{12} - \frac{4}{12} = \frac{11}{12} \end{array}$$

$$\frac{11}{12}$$

 1 mark

36

$$60 - 42 \div 6 =$$

								6	BODMAS
								12	
								18	Remember to use
								24	the order of
								30	operations
								36	
								42	
								48	

$$60 - 42 \div 6$$

$$60 - 7 = 53$$

$$53$$

 1 mark


E 0 0 0 6 0 A 0 1 7 2 0

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Standards
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Agency

2016 key stage 2 mathematics

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