

2024 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						



1

$689 + 38 =$

$$\begin{array}{r} 689 \\ + 38 \\ \hline 727 \end{array}$$

727

1 mark

2

$72 \div 3 =$

$$\begin{array}{r} 24 \\ 3 \overline{)72} \end{array}$$

24

1 mark

3

$23 \times 6 =$

$$\begin{array}{r} 20 \times 6 = 120 \\ 3 \times 6 = 18 \end{array}$$

$$\begin{array}{r} 120 \\ + 18 \\ \hline 138 \end{array}$$

138

1 mark



4

$4,532 - 19 =$

$$\begin{array}{r} 4532 - 20 = 4512 \\ 4512 + 1 = 4513 \end{array}$$

4513

1 mark

5

$3 \times 391 =$

$$\begin{array}{r} 3 \times 300 = 900 \\ 3 \times 90 = 270 \\ 3 \times 1 = 3 \\ + \\ \hline 1173 \end{array}$$

1173

1 mark

6

$8641 = 9,171 - 530$

$$\begin{array}{r} 8 \\ 9171 \\ - 530 \\ \hline 8641 \end{array}$$

1 mark



7

$6,600 \div 6 =$

$$\begin{array}{r} 1100 \\ 6600 \end{array} \text{ or } \begin{array}{l} 6 \times 11 = 66 \\ 6 \times 1100 = 6600 \end{array}$$

1100

1 mark

8

$99 \times 10 \times 1 =$

$$\begin{array}{l} 99 \times 10 = 990 \\ 990 \times 1 = 990 \end{array}$$

990

1 mark

9

$7.68 + 13.493 =$

$$\begin{array}{r} 13.493 \\ + 7.680 \\ \hline 21.173 \end{array}$$

Make sure the decimals
line up correctly and add place holders.

21.173

1 mark



10

$9 \times 752 =$

$$\begin{array}{r} 752 \\ \times 9 \\ \hline 6768 \\ \hline \end{array}$$

or

$$\begin{array}{r} 700 \times 9 = 6300 \\ 50 \times 9 = 450 \\ 2 \times 9 = 18 \\ \hline + 6768 \end{array}$$

6768

1 mark

11

$640 \div 8 =$

$8 \times 8 = 64$

so

$8 \times 80 = 640$

80

1 mark

12

268 = $357 - 89$

$$\begin{array}{r} 2^1 4 \\ 357 \\ - 89 \\ \hline 268 \end{array}$$

or

$357 - 100 = 257$

$257 + 11 = 268$

1 mark



13

$561 \div 3 =$

$$\begin{array}{r} 187 \\ 3 \overline{)5621} \\ \underline{3} \\ 26 \\ \underline{24} \\ 21 \\ \underline{21} \\ 0 \end{array}$$

187

1 mark

14

$\frac{4}{6} \times \frac{1}{8} =$

$$\frac{\cancel{4}}{6} \times \frac{1}{8} = \frac{\cancel{4}}{6 \times 2} = \frac{\cancel{4}}{12}$$

 $\frac{4}{12}$

1 mark

15

$$\boxed{90} = 630 \div 7$$

$$7 \times 9 = 63$$

$$\text{so } 7 \times 90 = 630$$

1 mark



16

$$6,020,070 = 6,000,000 + \boxed{20000} + 70$$

$$\begin{array}{r} 6020070 \\ - 6000070 \\ \hline 20000 \\ - 70 \\ \hline 19930 \end{array}$$

1 mark

17

$$2,671 \times 1,000 =$$

$$2671 \times \underline{1000} = 2671\underline{000}$$

$$\boxed{2,671,000}$$

1 mark

18

$$\frac{5}{12} + \frac{1}{3} =$$

$$\frac{5}{12} + \frac{1}{3}$$

Find a common denominator first.

$$\left(\frac{5}{12} + \frac{4}{12} = \frac{9}{12} \right)$$

$$\boxed{\frac{9}{12}}$$

1 mark



19

$$\frac{2}{3} + \frac{4}{5} =$$

$$\overset{\times 2}{\frac{2}{3}} + \overset{\times 4}{\frac{4}{5}}$$

$$\left(\frac{10}{15} + \frac{12}{15} = \frac{22}{15}\right) \text{ or } 1\frac{7}{15}$$

Find a common denominator first.

$$\frac{22}{15} \text{ or } 1\frac{7}{15}$$

1 mark

20

$$\begin{array}{r} 6312 \\ \times \quad \quad 14 \\ \hline 25248 \\ + 63120 \\ \hline 88368 \end{array}$$

Remember to add in the place holder.

Show
your
method

$$88368$$

2 marks



21

$2 + 3^3 =$

$3^3 = 27$

$2 + 27 = 29$

Remember the order of operations BIDMAS

29

1 mark

22

$15.5 \div 100 =$

$15.5 \div 10 = 0.155$
 0.155

0.155

1 mark

23

$90 - 56 \div 8 =$

$56 \div 8 = 7$

$90 - 7 = 83$

Remember the order of operations BIDMAS

83

1 mark



24

$63 - 5.8 =$

$$\begin{array}{r} 512 \\ \cancel{6}3.0 \\ - 5.8 \\ \hline 57.2 \end{array}$$

Add in and align the decimal points.

57.2



1 mark

25

$$\begin{array}{r} 418 \\ \times 47 \\ \hline + 2926 \\ + 16520 \\ \hline 19646 \end{array}$$

Remember to add in the place holder.



Show your method

19646



2 marks



26

$$\frac{6}{7} - \frac{11}{21} =$$

$$\overset{\times 3}{\frac{6}{7}} - \frac{11}{21}$$

Find a common denominator first.

$$\frac{18}{21} - \frac{11}{21} = \frac{7}{21}$$

$$\frac{7}{21}$$

1 mark

27

$$\frac{7}{10} \div 2 =$$

$$\frac{7}{10} \div 2 = \frac{7}{10} \times \frac{1}{2} = \frac{7}{20}$$

$$\frac{7}{20}$$

1 mark

28

$$2\frac{3}{8} - \frac{5}{8} =$$

$$2\frac{3}{8} - \frac{5}{8}$$

$$1\frac{11}{8} - \frac{5}{8} = 1\frac{6}{8} = 1\frac{3}{4}$$

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

1 mark



29

$0.7 \times 26 =$

$7 \times 26 = 7 \times 20 + 7 \times 6 = 140 + 42$

$140 + 42 = 182$

$182 \div 10 = 18.2$

18.2

1 mark

30

$$\begin{array}{r}
 \\
 \\
 \\
 34 \overline{) 986} \\
 \underline{- 680} \\
 = 306 \\
 \underline{- 102} \\
 = 204 \\
 \underline{- 102} \\
 = 102 \\
 \underline{- 102} \\
 =
 \end{array}$$

Show
your
method

$$\begin{array}{r}
 1 \times 34 \\
 2 \times 68 \\
 3 \times 102 \\
 4 \times 136
 \end{array}$$

29

2 marks



31

99% of 600 =

$$1\% \text{ of } 600 = 6$$

$$600 - 6 = 594$$

594



1 mark

32 $\frac{1}{2} \div 3 =$

$$\frac{1}{2} \div 3 = \frac{1}{2} \overset{\times}{\underset{\times}{\times}} \frac{1}{3} = \frac{1}{6}$$

 $\frac{1}{6}$ 

1 mark



33

43% of 900 =

$$10\% \text{ of } 900 = 90$$

$$1\% \text{ of } 900 = 9$$

$$90 \times 4 = 360$$

$$9 \times 3 = 27$$

$$387$$

387



1 mark

34

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

$$2\frac{1}{6} - \frac{2^{x2}}{3^{x2}}$$

$$2\frac{1}{6} - \frac{4}{6}$$

$$\frac{13}{6} - \frac{4}{6} = \frac{9}{6} = 1\frac{3}{6} = 1\frac{1}{2}$$

Find a common denominator first then convert to improper fractions.

1 $\frac{1}{2}$ 

1 mark



35

$$1\frac{1}{4} \times 39 =$$

$$39 \times 1 = 39$$

$$\frac{1}{4} \times 39 = \frac{1}{4} \times \frac{39}{1} = \frac{39}{4} = 9\frac{3}{4}$$

$$39 + 9\frac{3}{4} = 48\frac{3}{4}$$

$$48\frac{3}{4}$$



1 mark

36

$$\begin{array}{r}
 734234 \\
 - 1460 \quad (20) \\
 \hline
 2774 \\
 - 1460 \quad (20) \\
 \hline
 1314 \\
 \times 0 \quad (10) \\
 \hline
 730 \\
 5814 \\
 - 365 \quad (5) \\
 \hline
 219 \\
 - 219 \quad (3) \\
 \hline
 58
 \end{array}$$

10	730
20	1460
5	365
1	73
2	146
3	219

$$58$$



2 marks

Show
your
method

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2024 key stage 2 mathematics

Paper 1: arithmetic

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