Key stage 2

Mathematics

Paper 1: arithmetic

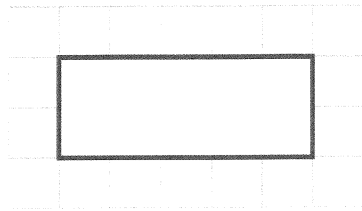| First name	
Middle name	
Last name	
Date of birth	Day Month Year
School name	
DfE number	

Instructions

You **must 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 answer as a common fraction, a mixed number or a whole number as appropriate.

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 number of marks available for each question.

In this test, long division and long multiplication questions are worth **2 marks each**. You will be awarded **2** marks for a correct answer. You may get **1** mark for showing a formal method.

All other questions are worth **1 mark each**.

4 | $\boxed{8413}$ = 8,005 + 408

$$\begin{array}{r} 8005 \\ +408 \\ \hline 8413 \\ {}_1 \end{array}$$

1 mark

5 | 2 × 4 × 30 =

2 × 4 = 8

$$\begin{array}{r} 30 \\ \times8 \\ \hline 240 \end{array}$$

$\boxed{240}$

1 mark

6 | $\boxed{960}$ = 10 × 96

96 × 10 = 960

1 mark

10 $8 \times 65 =$

$$
\begin{array}{r}
6\,5 \\
\times \quad 8 \\
\hline
5\,2\,0 \\
4 \\
\end{array}
$$

520

1 mark

11 $2{,}800 \div 7 =$

$$
\begin{array}{r}
0\,4\,0\,0 \\
7\,\overline{)\,2\,^2 8\,0\,0} \\
\end{array}
$$

400

1 mark

12 $801 - \boxed{6} = 795$

$$
\begin{array}{r}
7\,9 \\
8\,0\,1 \\
-\ 7\,9\,5 \\
\hline
0\,0\,6 \\
\end{array}
$$

1 mark

16

$$\frac{3}{16} + \frac{5}{8} =$$

$$\frac{3}{16} + \frac{5^{\times 2}}{8^{\times 2}}$$

Find a common denominator before adding fractions

$$\frac{3}{16} + \frac{10}{16} = \frac{13}{16}$$

$$\boxed{\frac{13}{16}}$$

1 mark

17

$$0.3 \div 10 =$$

$$0 \cdot 3$$
$$0 \cdot 03$$

$$\boxed{0.03}$$

1 mark

18

$$\frac{1}{3} + \frac{2}{6} + \frac{5}{18} =$$

$$\frac{{}^{\times 6}1}{{}_{\times 6}3} + \frac{{}^{\times 3}2}{{}_{\times 3}6} + \frac{5}{18}$$

Find a common denominator before adding fractions e.g 18

$$\frac{6}{18} + \frac{6}{18} + \frac{5}{18} = \frac{17}{18}$$

$$\boxed{\frac{17}{18}}$$

1 mark

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21

$\frac{1}{8} \div 3 =$

$\frac{1}{8} \div 3$

$\frac{1}{8} \times \frac{1}{3} = \frac{1}{24}$

$\frac{1}{24}$

1 mark

22

$1 + \frac{2}{7} + \frac{5}{7} =$

$1 + \frac{2}{7} + \frac{5}{7} = 1 + \frac{7}{7} = 1 + 1 = 2$

2

1 mark

23

$70 + 48 \div 6 =$

$48 \div 6 = 8$

Remember to use the correct order of operations BIDMAS

$70 + 8 = 78$

78

1 mark

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26 $5,746 \div 5 =$

$$5\overline{)5\,7^2\,4^4\,6} = 1149\,r1$$

or

$$5\overline{)5\,7^2\,4^4\,6{\cdot}^10} = 1149.2$$

1149 r1

1 mark

27 52% of $700 =$

52% of 700 = 364

50% of 700 = 350

1% of 700 = 7

2% of 700 = 14

$$\begin{array}{r} 350 \\ +\ 14 \\ \hline 364 \end{array}$$

364

1 mark

30

95% of 180 =

10% of 180 = 18
5% of 180 = 9

180 - 9 = 171

171

1 mark

31

0.4 × 37 =

37
× 4
148

148 ÷ 10 = 14·8

14·8

1 mark

34 $2\frac{5}{6} - \frac{3}{4} =$

$2\frac{\times 2 \, 5}{\times 2 \, 6} - \frac{3^{\times 3}}{4^{\times 3}}$

Remember to find a common denominator e.g. 12

$2\frac{10}{12} - \frac{9}{12} = 2\frac{1}{12}$

$2\frac{1}{12}$

1 mark

35 38% of 750 =

10% of 750 = 75
1% of 750 = 7.5

$\begin{array}{r} 2 2 5 \\ + \quad 6 0 \\ \hline 2 8 5 \end{array}$

$\begin{array}{r} 7 5 \\ \times \quad 3 \\ \hline 2 2 5 \end{array}$

$\begin{array}{r} 7 . 5 \\ \times \quad 8 \\ \hline 6 0 . 0 \\ \scriptstyle 4 \end{array}$

285

1 mark

36 $\frac{2}{3} \times 900 =$

$3 \overline{)900}$ = 300

$300 \times 2 = 600$

Remember to divide by the denominator and multiply by the numerator.

600

1 mark

[END OF TEST]

Please do not write on this page.