SATS BOOT CAMP

National curriculum tests

Key Stage 2

Mathematics

Arithmetic

First name	
Last name	

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Instructions

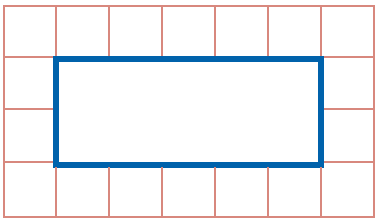
You **must not** use a calculator to answer any questions in this test.

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 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 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**.

1 ☐ = 4,000 + 80

1 mark

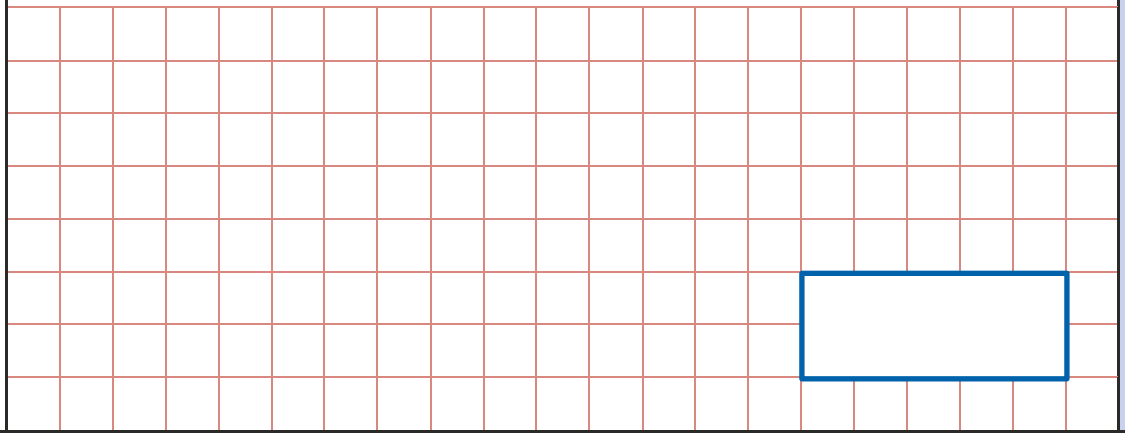
2 2.25 ÷ 10 = ☐

1 mark

3 10,000 – 450 = ☐

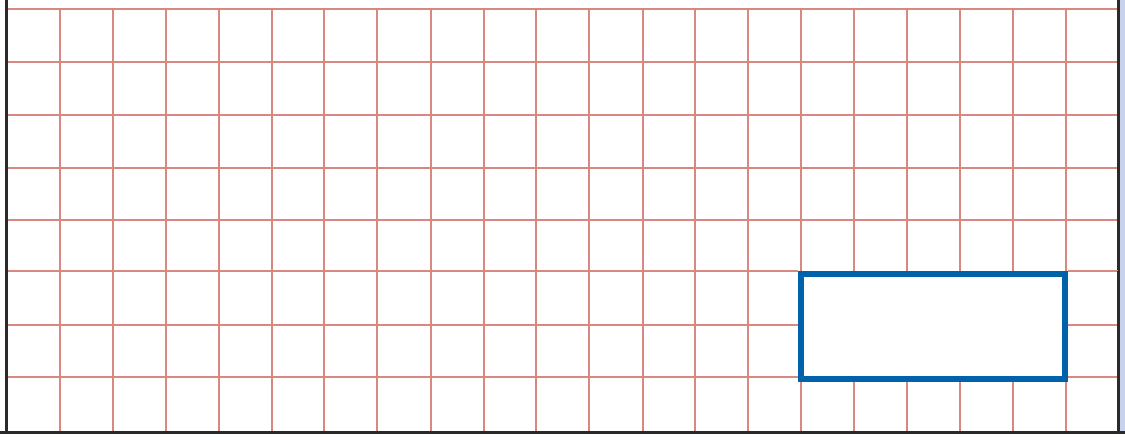
1 mark

4 4.3 x 2 =



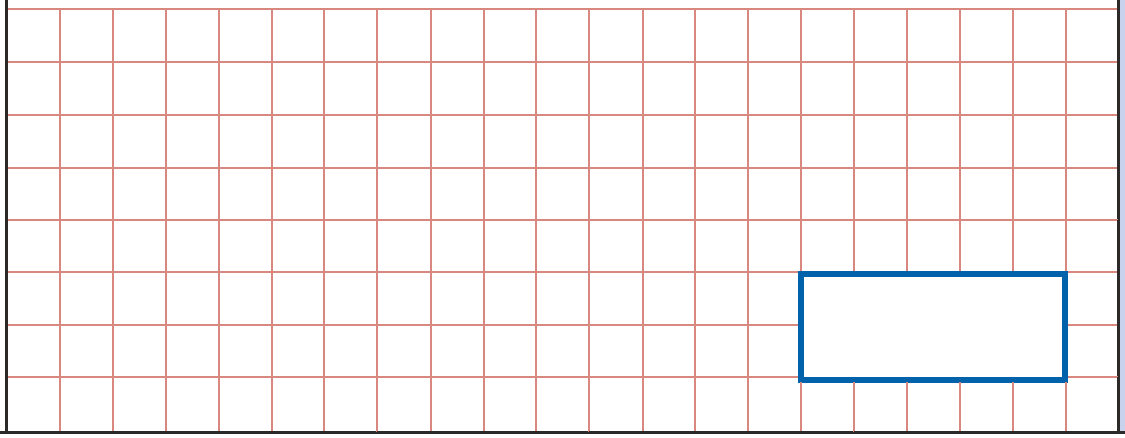
1 mark

5 26 + 55 =



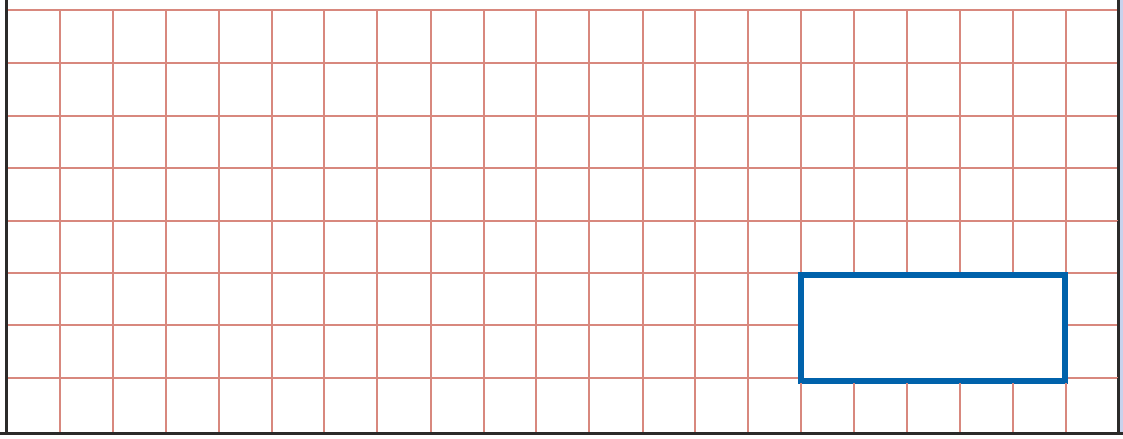
1 mark

6 4.74 + 2.136 =



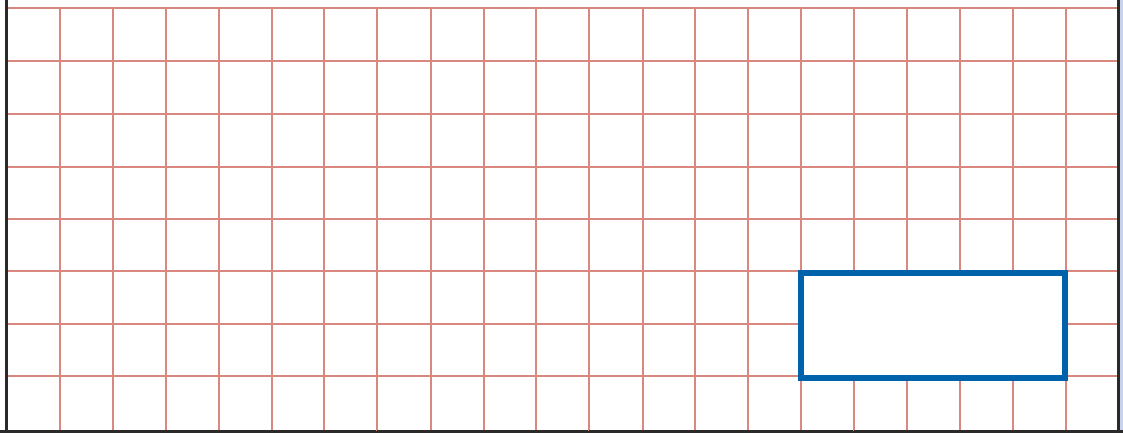
1 mark

7 160 ÷ 4 =



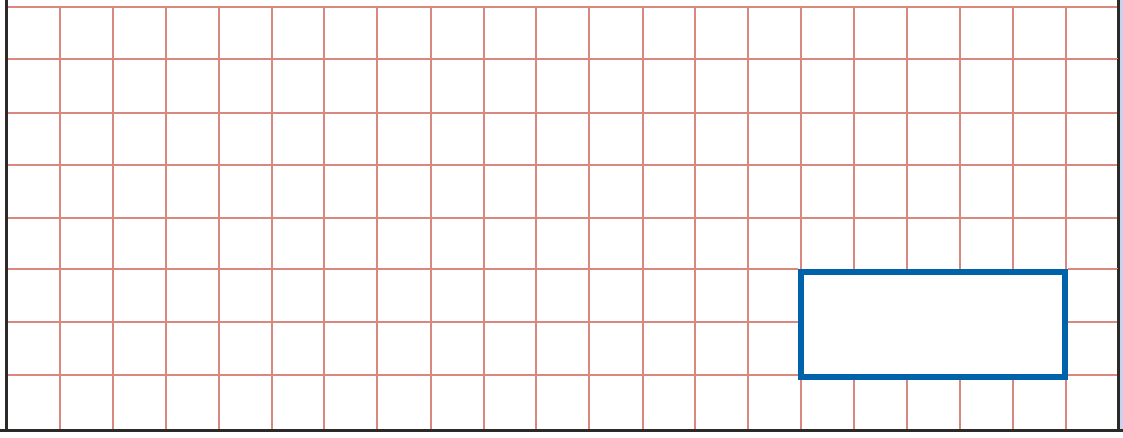
1 mark

8 (3 x 20) – 9 =



1 mark

9 110 ÷ 11 =



1 mark

10 75% of 4,500 =

1 mark

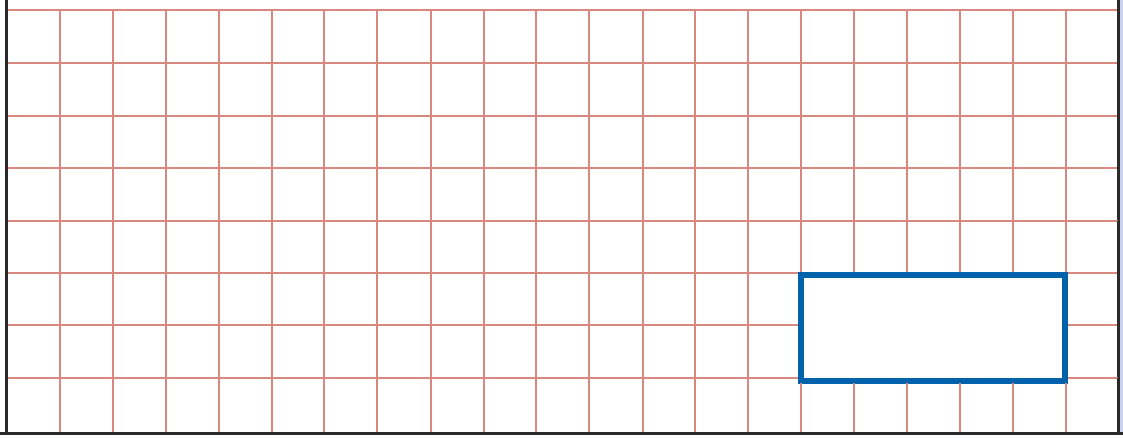
11 704 – ☐ = 696

1 mark

12 ☐ = 99 − 54

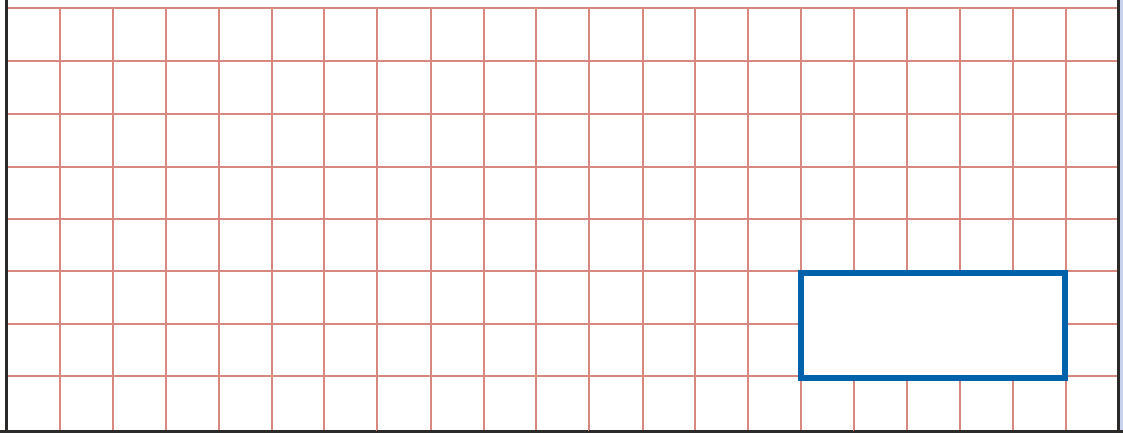
1 mark

13 1,440 ÷ 12 =



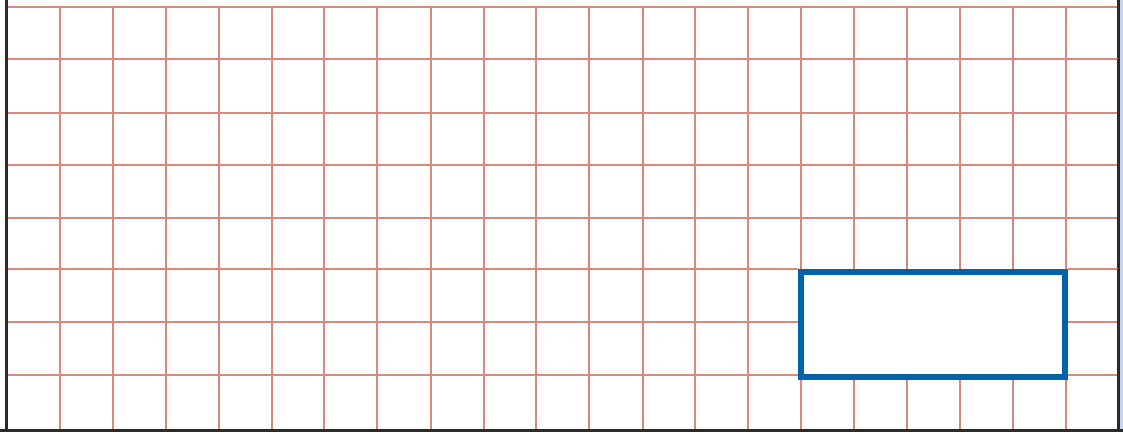
1 mark

14 36.19 × 10 =



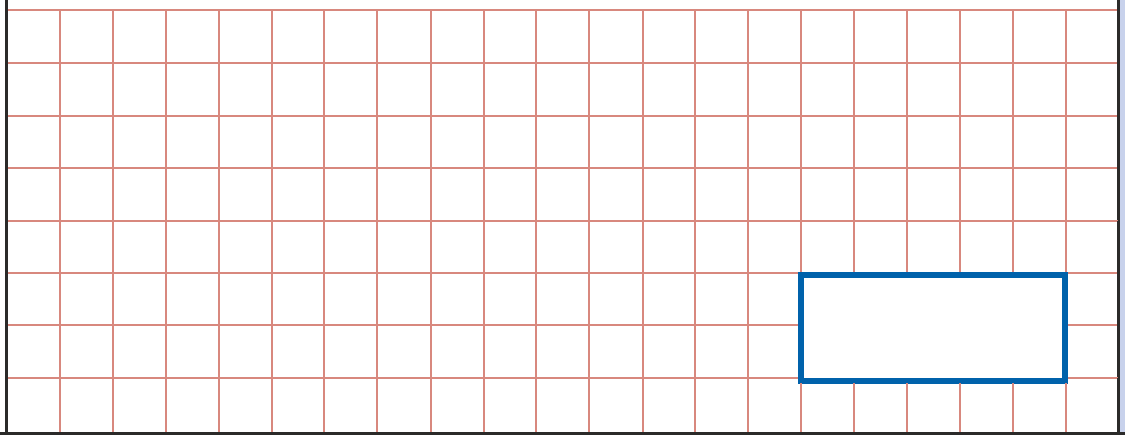
1 mark

15 90 ÷ (20 − 11) =



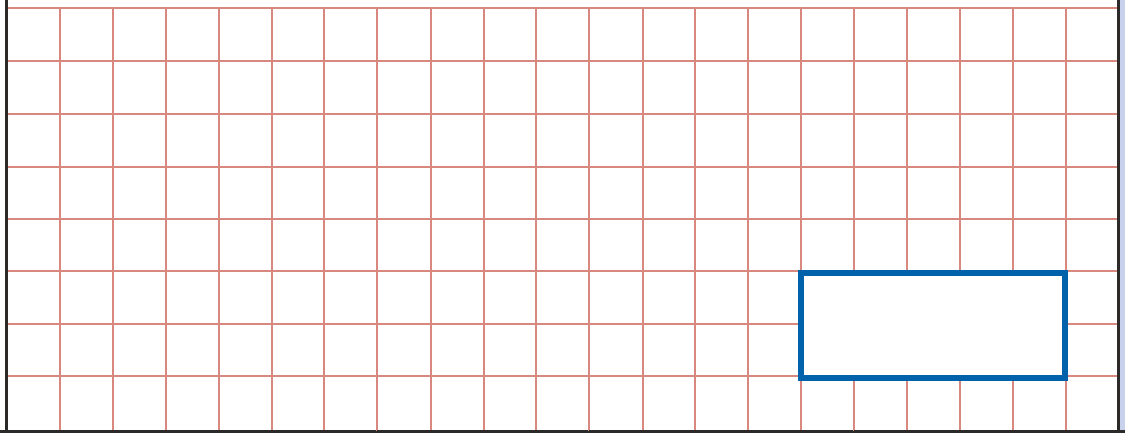
1 mark

16 $205 \times 1{,}000 =$



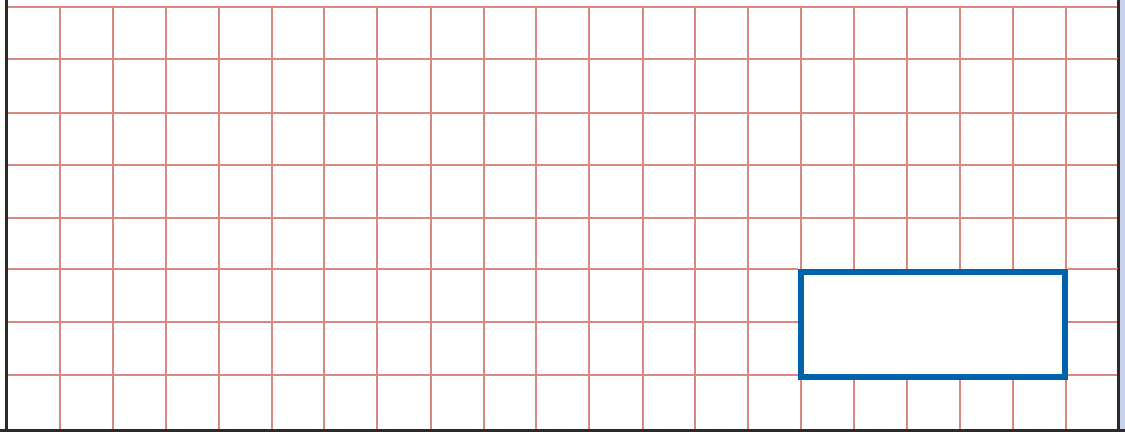
1 mark

17 $4^3 =$



1 mark

18 $9 - 4.35 =$



1 mark

19 30% of 3,000 =

1 mark

20 10 − 1.1 =

1 mark

21 0.6 ÷ 100 =

1 mark

22 $2\frac{2}{9} - \frac{5}{9} =$

1 mark

23

$$\begin{array}{r} 6\,5\,9 \\ \times\quad 8\,4 \\ \hline \end{array}$$

Show your method

2 marks

24 $\frac{3}{5} + \frac{1}{4} =$

1 mark

25 $4\overline{)6874}$

Show your method

2 marks

26 $3\frac{1}{4} + 1\frac{1}{8} =$

1 mark

27 20% of 440 =

1 mark

28 $\frac{7}{8} - \frac{1}{5} =$

1 mark

29 $(10 \times 3) \div (9 - 4) =$

1 mark

30

$$\begin{array}{r} 2\,9\,5\,7 \\ \times \quad\;\; 5\,3 \\ \hline \end{array}$$

Show your method

2 marks

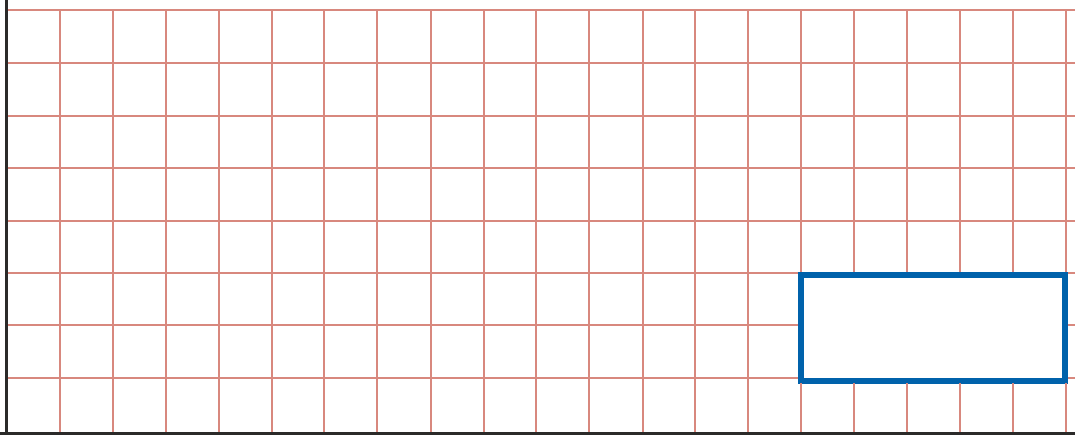
31 $\frac{5}{6} \div 2 =$

1 mark

32 $3\frac{1}{4} - \frac{2}{3} =$

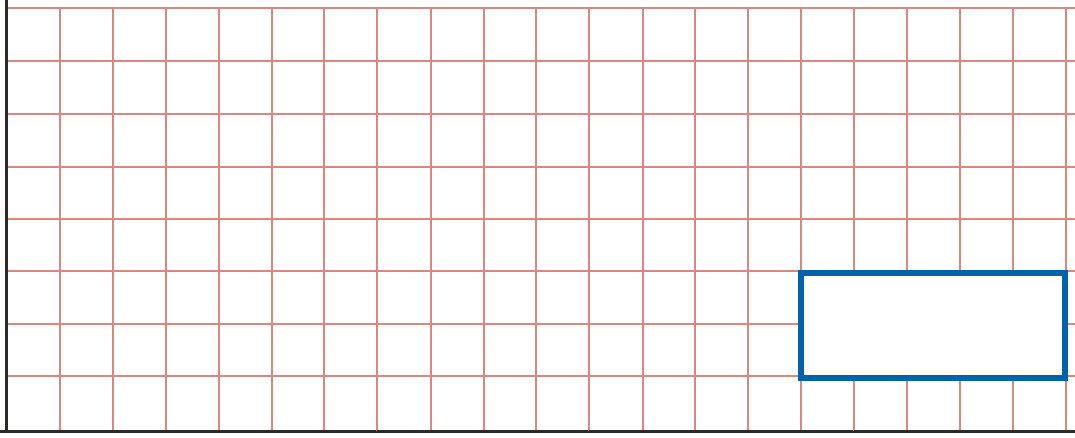
1 mark

33 28% of 500 =



1 mark

34 $1\frac{3}{7} \times 10 =$



1 mark

35 $\frac{7}{8}$ x 720 =

1 mark

36 9 2 6 8 0 8

Show your method

2 marks

[END OF TEST]

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Answers

Qu.	Requirement	Mark	Additional guidance
1	4,080	**1m**	
2	0.225	**1m**	
3	9,550	**1m**	
4	8.6	**1m**	
5	81	**1m**	
6	6.876	**1m**	
7	40	**1m**	
8	51	**1m**	
9	10	**1m**	
10	3,375	**1m**	**Do not** accept 3,375%
11	8	**1m**	
12	45	**1m**	**Do not** accept -45
13	120	**1m**	
14	361.9	**1m**	
15	10	**1m**	
16	205,000	**1m**	
17	64	**1m**	
18	4.65	**1m**	
19	900	**1m**	**Do not** accept 900%
20	8.9	**1m**	
21	0.006	**1m**	
22	$1\frac{6}{9}$	**1m**	Accept equivalent fractions or an **exact** decimal equivalent, e.g. $1.\overline{666666}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
23	Award **TWO** marks for the correct answer of 55,356 If the answer is incorrect, award **ONE** mark for a formal method of long multiplication with no more than **ONE** arithmetic error.	**Up to 2m**	Working must be carried through to reach a final answer for the award of **ONE** mark. **Do not** award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens.

Qu.	Requirement	Mark	Additional guidance
24	$\frac{17}{20}$	**1m**	Accept equivalent fractions or an **exact** decimal equivalent, e.g. 0.85
25	Award **TWO** marks for the correct answer of 19 If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetic error.	**Up to 2m**	Working must be carried through to reach a final answer for the award of **ONE** mark. Short division methods **must** be supported by evidence of appropriate carrying figures to indicate the use of a division algorithm, and be a complete method. The carrying figure **must** be less than the divisor.
26	$4\frac{3}{8}$ 0R $\frac{35}{8}$	**1m**	Accept equivalent mixed numbers, fractions or an **exact** decimal equivalent, e.g. 4.375
27	88	**1m**	**Do not** accept 88%
28	$\frac{27}{40}$	**1m**	Accept equivalent fractions or an **exact** decimal equivalent, e.g. 0.675 (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
29	6	**1m**	
30	Award **TWO** marks for the correct answer of 156,721 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error.	**Up to 2m**	Working must be carried through to reach a final answer for the award of **ONE** mark. **Do not** award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens.
31	$\frac{5}{12}$	**1m**	Accept equivalent fractions or an **exact** decimal equivalent, e.g. $0.\overline{41666}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.

Qu.	Requirement	Mark	Additional guidance
32	$2\frac{7}{12}$ OR $\frac{31}{12}$	**1m**	Accept equivalent mixed numbers or fractions.
33	140	**1m**	**Do not** accept 140%
34	$14\frac{2}{7}$ OR $\frac{100}{7}$	**1m**	Accept equivalent mixed numbers or fractions.
35	630	**1m**	
36	Award **TWO** marks for the correct answer of 74 If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetic error.	**Up to 2m**	Working must be carried through to reach a final answer for the award of **ONE** mark. Short division methods **must** be supported by evidence of appropriate carrying figures to indicate the use of a division algorithm, and be a complete method. The carrying figure **must** be less than the divisor.