

KS2 SATs Paper

Arithmetic Practice Paper 1

Pack 3

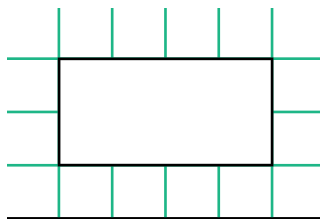
First name	
Last name	
Class	
School	
Score	

Instructions

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

Questions and answers

- 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**.

1	$35 \times 2 =$																				<input type="text"/> 1 mark

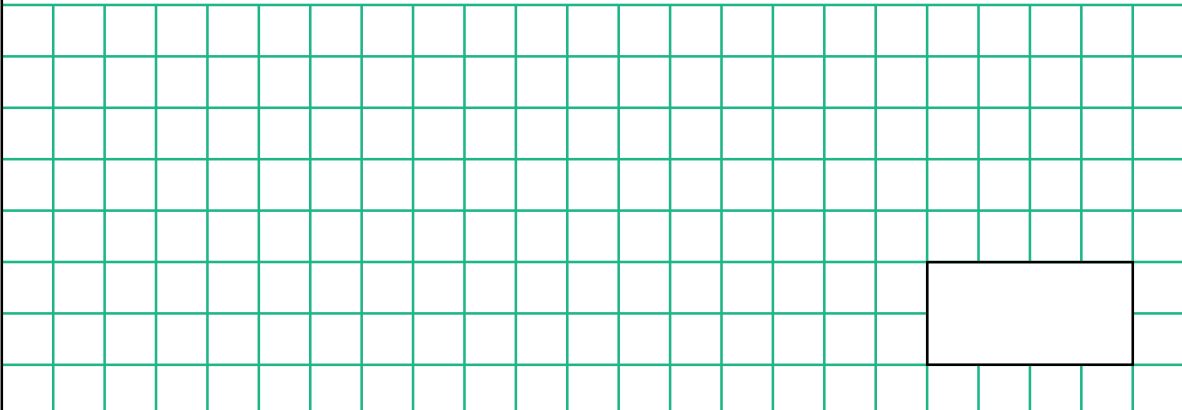
2	$5263 + 100 =$																				<input type="text"/> 1 mark

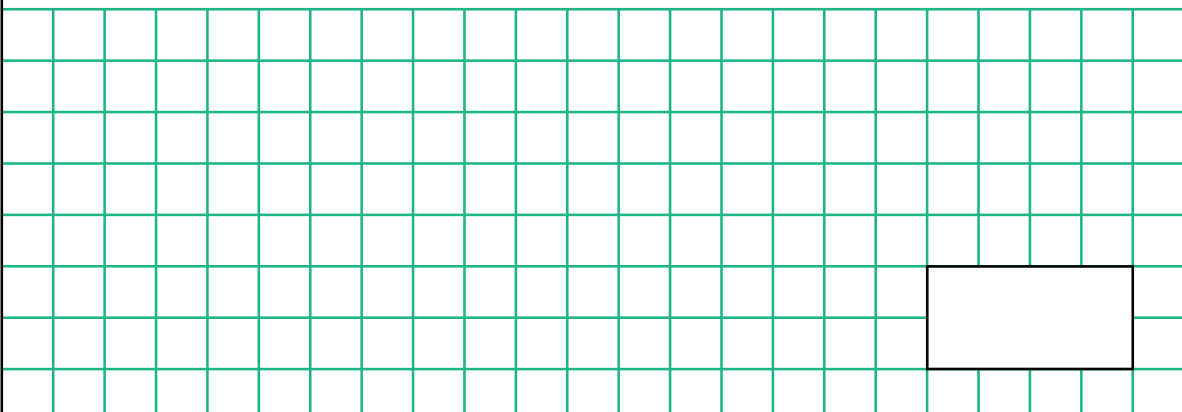
3	$724 - 8 =$																				<input type="text"/> 1 mark

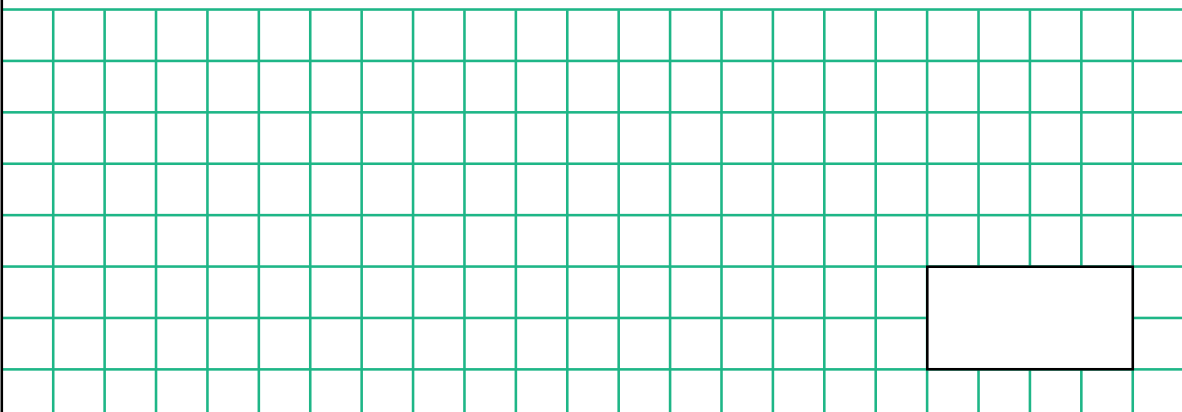
4	$369 \times 0 =$		
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>	1 mark

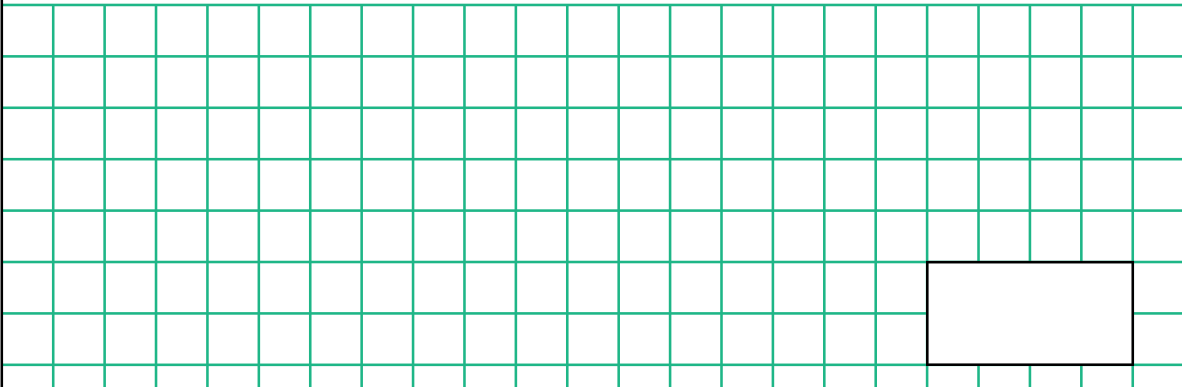
5	<div style="border: 1px solid black; width: 60px; height: 30px; display: inline-block; margin-right: 10px;"></div> $= 55 + 6$		
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>	1 mark

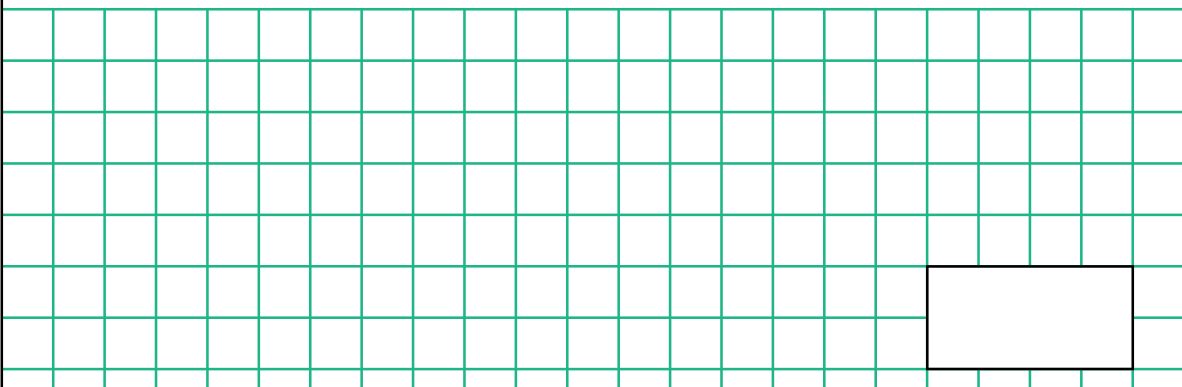
6	$3 \times 8 \times 4 =$		
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div>	1 mark

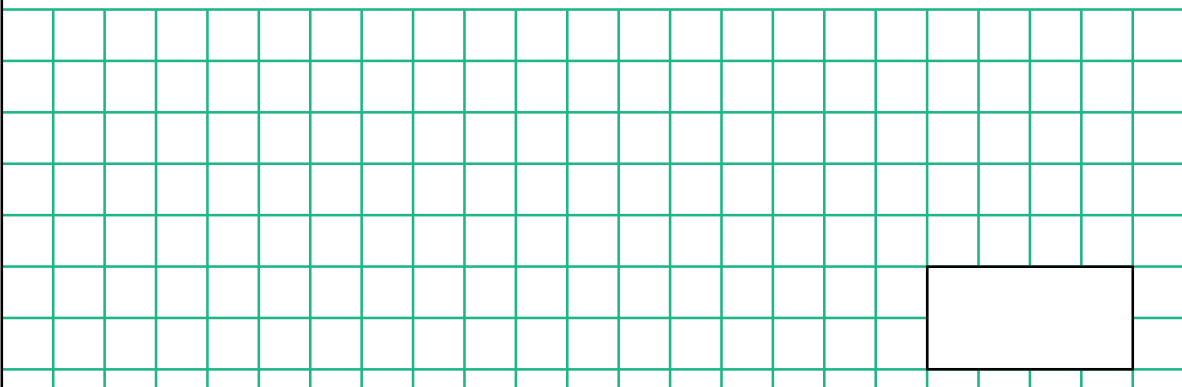
7	$6 - 15 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

8	$48\,986 + 4\,209 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

9	<div style="border: 1px solid black; width: 50px; height: 30px; display: inline-block; margin-right: 10px;"></div> $= 6973 - 685$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

10	$952 \div 8 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

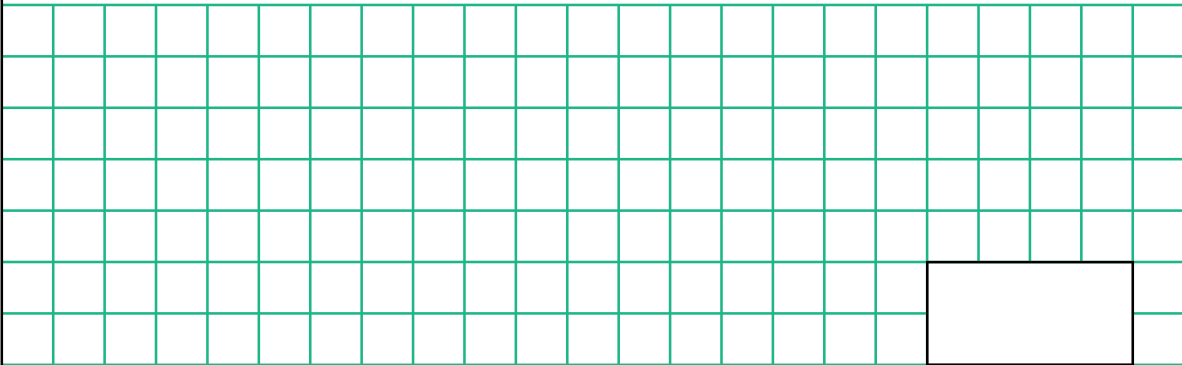
11	$6.2 + 0.7 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

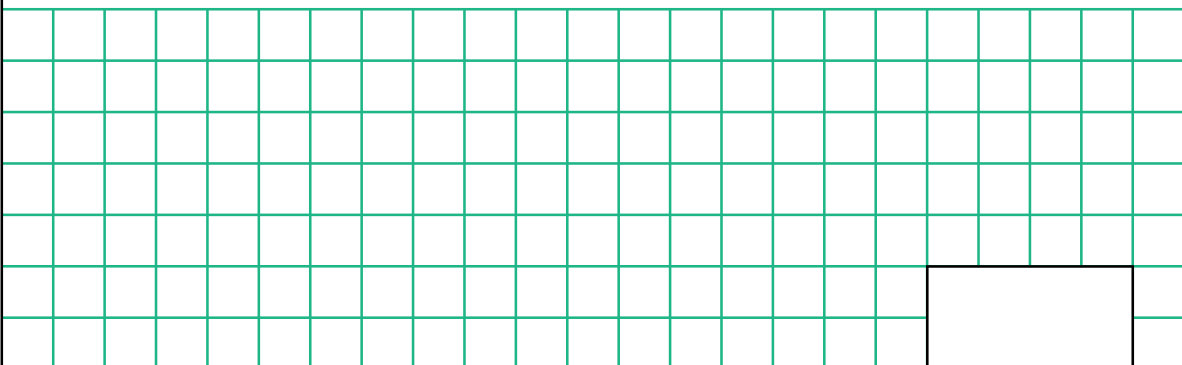
12	$60 \times 400 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

13	$117 = \square \times 9$	
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>1 mark</p>

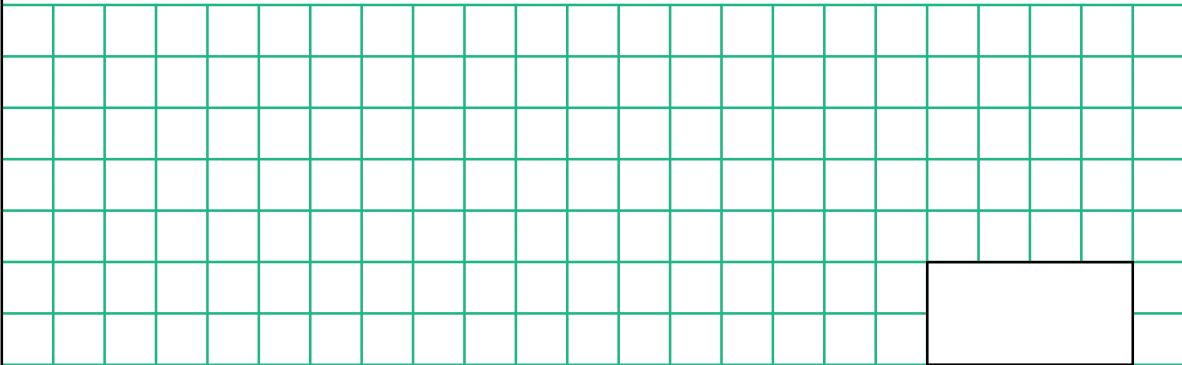
14	$\frac{6}{11} + \frac{2}{11} =$	
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>1 mark</p>

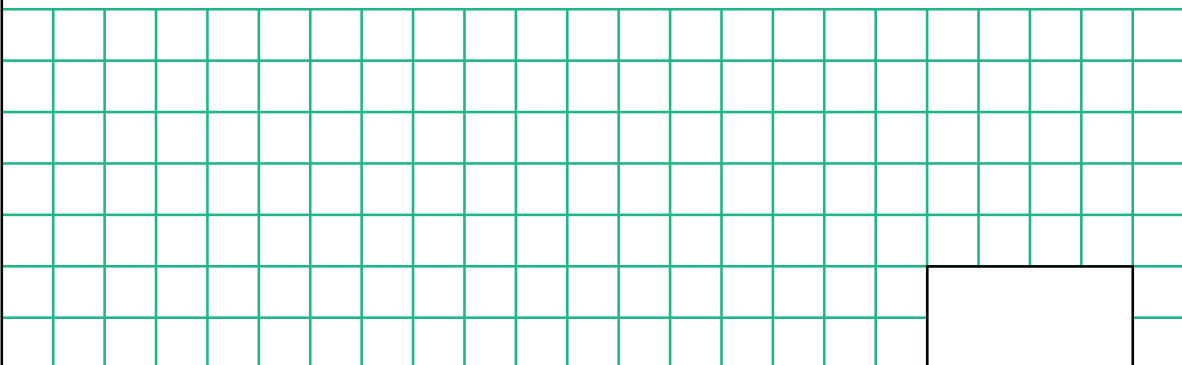
15	$582 \div 100 =$	
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>1 mark</p>

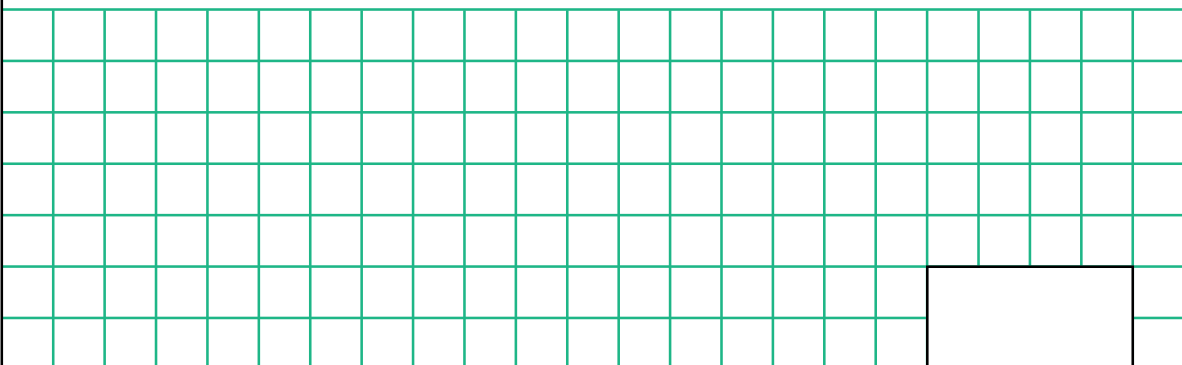
16	$18.6 + 1.007 =$		
		<input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 30px; height: 30px;" type="checkbox"/> 1 mark

17	$4\ 803\ 529 - 10\ 000 =$		
		<input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 30px; height: 30px;" type="checkbox"/> 1 mark

18	$1\ 000 \times 50.4 =$		
		<input style="width: 100px; height: 30px;" type="text"/>	<input style="width: 30px; height: 30px;" type="checkbox"/> 1 mark

19	$27.537 - 9.68 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

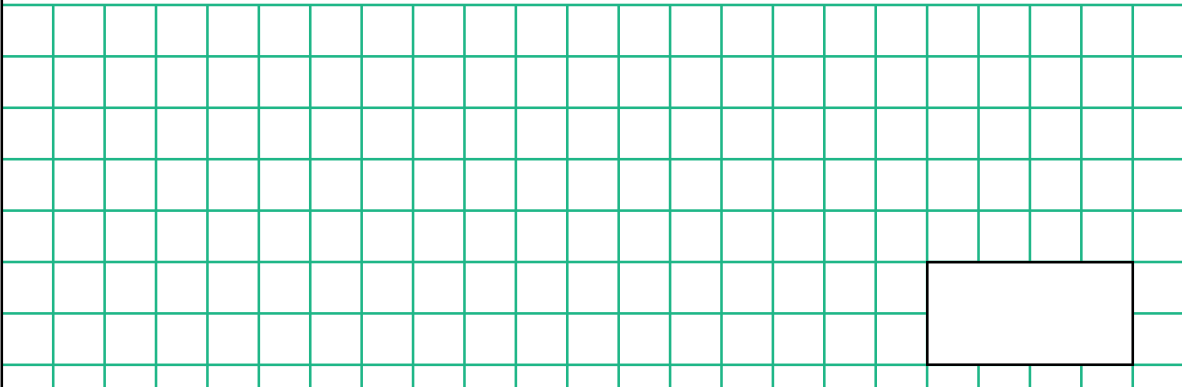
20	$9^2 + 13 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

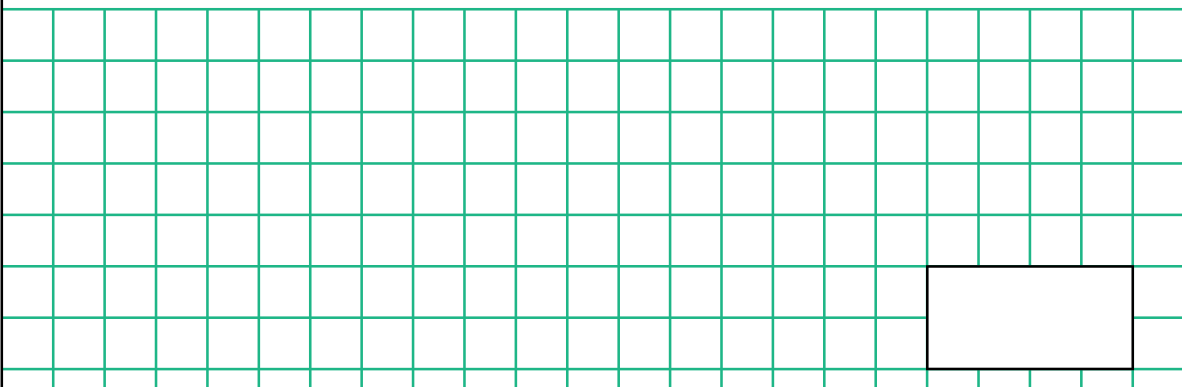
21	$6\,600 \div 11 =$		
		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

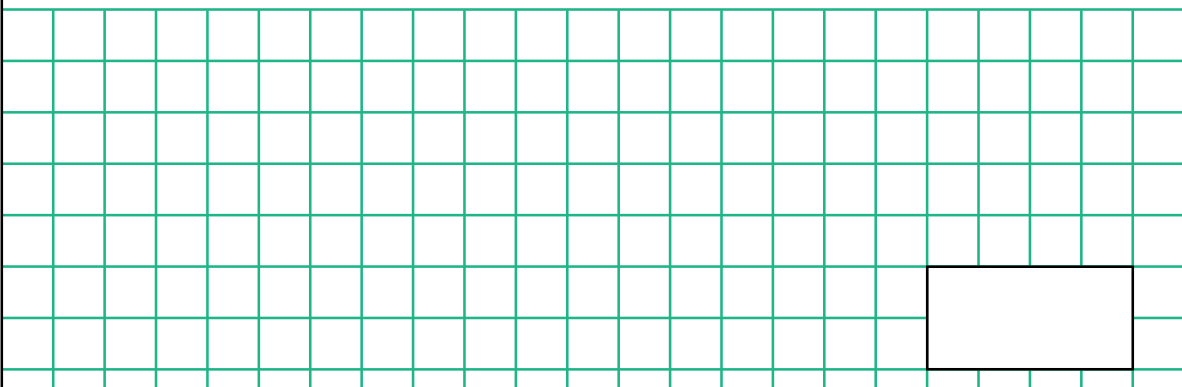
22	$10\,000\,000 - 401 =$		
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 25px; margin: 0 auto;"></div>	1 mark

23	$\frac{1}{4} + \square = \frac{9}{12}$		
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 25px; margin: 0 auto;"></div>	1 mark

24	$\frac{7}{9}$ of 360 =		
	<div style="border: 1px solid black; width: 150px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 25px; margin: 0 auto;"></div>	1 mark

25	$3.67 \times 9 =$	
		
	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

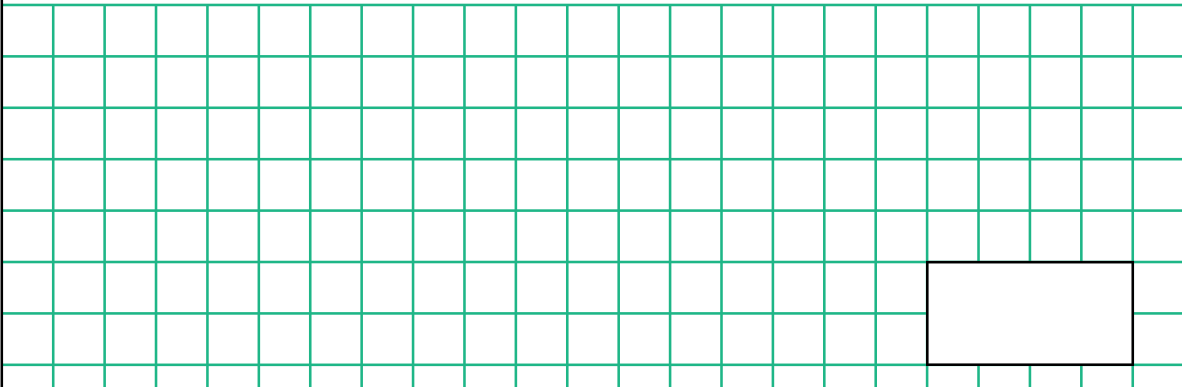
26	$1\frac{3}{8} \times 4 =$	
		
	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

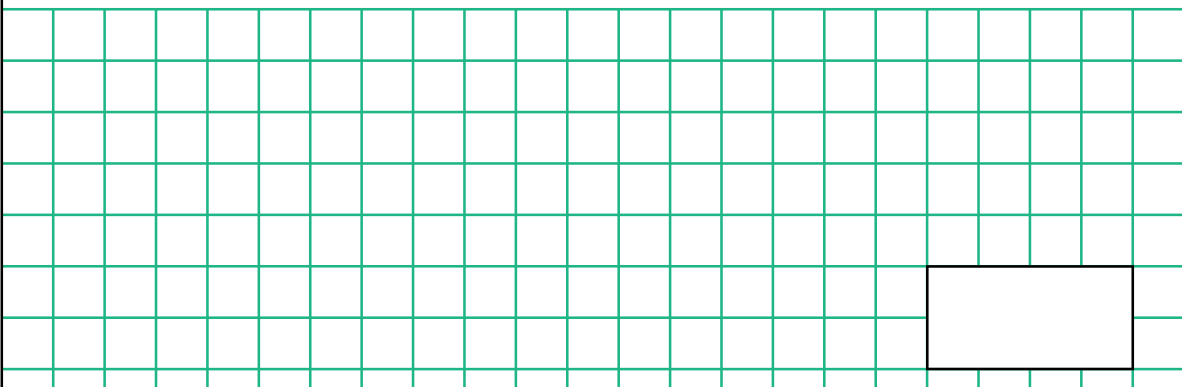
27	$16 \overline{)544}$	
		
	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

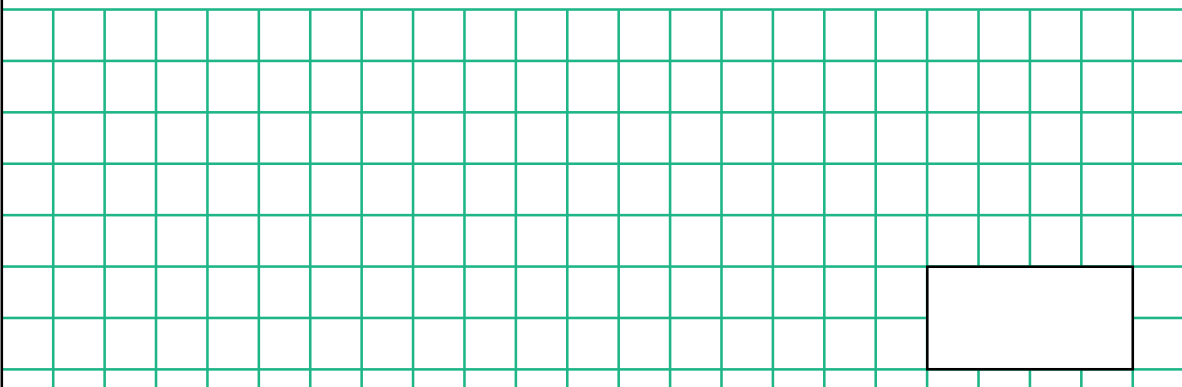
28	$\frac{6}{7} \div 6 =$ <div style="border: 1px solid #28a745; height: 150px; margin-top: 10px;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>1 mark</p>
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29	<div style="text-align: center; margin-bottom: 10px;"> $\begin{array}{r} 47 \\ \times 34 \\ \hline \end{array}$ </div> <div style="border: 1px solid #28a745; height: 150px; margin-top: 10px;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>1 mark</p>
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30	$60\% \text{ of } 4\,800 =$ <div style="border: 1px solid #28a745; height: 150px; margin-top: 10px;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>1 mark</p>
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31	$6 + 3 \times 8 =$		
		<div style="border: 1px solid black; width: 100px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

32	$29 \overline{)1392}$		
		<div style="border: 1px solid black; width: 100px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

33	$2\frac{1}{5} - 1\frac{1}{3} =$		
		<div style="border: 1px solid black; width: 100px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> 1 mark

34	<div style="text-align: right; margin-bottom: 10px;"> 6 0 3 9 x 5 8 ----- </div> <div style="height: 150px; border: 1px solid #ccc; position: relative;"> <div style="position: absolute; top: 10px; left: 10px; color: #0070c0; font-size: 0.8em;">Show your method</div> </div>	<div style="border: 1px solid black; width: 40px; height: 25px; margin: 0 auto;"></div> <div style="font-weight: bold; font-size: 0.8em;">1 mark</div>
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35	<div style="text-align: right; margin-bottom: 10px;"> $\frac{3}{6} \times \frac{4}{7} =$ </div> <div style="height: 150px; border: 1px solid #ccc; position: relative;"> </div>	<div style="border: 1px solid black; width: 40px; height: 25px; margin: 0 auto;"></div> <div style="font-weight: bold; font-size: 0.8em;">1 mark</div>
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36	<div style="text-align: right; margin-bottom: 10px;"> $\frac{5}{6} \div 4 =$ </div> <div style="height: 150px; border: 1px solid #ccc; position: relative;"> </div>	<div style="border: 1px solid black; width: 40px; height: 25px; margin: 0 auto;"></div> <div style="font-weight: bold; font-size: 0.8em;">1 mark</div>
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Sample SATs Arithmetic Paper Mark Scheme

Q	Requirement	Mark	Additional guidance	Content Domain Ref.	NC Strand
1	70	1m		5C6a	Calculations
2	5363	1m		3N2b	Number
3	716	1m		3C1	Calculations
4	0	1m		4C6b	Calculations
5	61	1m		3C7	Calculations
6	96	1m		4C6b	Calculations
7	-9	1m	Do not accept 9	6N6	Number
8	53 195	1m		5C2	Calculations
9	6288	1m		4C2	Calculations
10	119	1m		5C7b	Calculations
11	6.9	1m		4F8	Fractions
12	24 000	1m		5C6a	Calculations
13	13	1m		3C7	Calculations
14	$\frac{8}{11}$	1m	Accept equivalence	4F4	Fractions
15	5.82	1m		5C6b	Calculations
16	19.607	1m		5F8	Fractions
17	4 793 529	1m		5C2	Calculations
18	50 400	1m		6F9a	Fractions
19	17.857	1m		5F8	Fractions
20	94	1m		6C9	Calculations
21	600	1m		5C6a	Calculations
22	9 999 599	1m		5C2	Calculations
23	$\frac{6}{12}$ or $\frac{1}{2}$ or $\frac{2}{4}$	1m	Accept equivalence	5F4	Fractions
24	280	1m		4F10a	Fractions
25	33.03	1m		6F9b	Fractions
26	4 $\frac{1}{8}$ or 5 $\frac{1}{2}$	1m	Accept equivalence	5F5	Fractions
27	Award TWO marks for the correct answer of 34. If the answer is incorrect, award ONE mark for the formal methods	Up to 2m	Working must be carried through to reach a final answer for the award of ONE mark.	6C7b	Fractions

Q	Requirement	Mark	Additional guidance	Content Domain Ref.	NC Strand
	<p>of division with no more than ONE arithmetical error, i.e.</p> <ul style="list-style-type: none"> long division algorithm, e.g. $ \begin{array}{r} 34r2 \\ 16 \overline{) 544} \\ \underline{- 480} \quad (30 \times 16) \\ 64 \\ \underline{- 62} \quad (\text{error}) (4 \times 16) \\ 2 \end{array} $ <p>OR</p> $ \begin{array}{r} 34r10 \\ 16 \overline{) 544} \\ \underline{- 48} \quad (3 \times 16) \\ 74 \quad (\text{error}) \\ \underline{- 64} \quad (4 \times 16) \\ 10 \end{array} $ <ul style="list-style-type: none"> short division algorithm, e.g. $ \begin{array}{r} 33r14 (\text{error}) \\ 16 \overline{) 544} \end{array} $		<p>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.</p>		
28	$\frac{1}{7}$	1m	Accept equivalence	6F5b	Fractions
29	<p>Award TWO marks for the correct answer of 1 598</p> <p>If the answer is incorrect, award ONE mark for the formal method of long multiplication with no more than ONE arithmetical error, e.g.</p>	Up to 2m	<p>Working must be carried through to reach a final answer for the award of ONE mark.</p> <p>Do not award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens:</p>	5C7a	Calculations

Q	Requirement	Mark	Additional guidance	Content Domain Ref.	NC Strand
	$\begin{array}{r} 47 \\ \times 34 \\ \hline 188 \\ + 1410 \\ \hline 1590 \text{ (error)} \end{array}$ <p>OR</p> $\begin{array}{r} 47 \\ \times 34 \\ \hline 186 \text{ (error)} \\ + 1410 \\ \hline 1596 \end{array}$				
30	2880	1m		6R2	Ratio
31	30	1m		6C9	Calculations
32	<p>Award TWO marks for the correct answer of 48</p> <p>If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetical error, i.e.</p> <ul style="list-style-type: none"> long division algorithm, e.g. $\begin{array}{r} 47 \text{ r } 27 \\ 29 \overline{) 1392} \\ \underline{- 1160} \quad (40 \times 29) \\ 230 \quad \text{(error)} \\ \underline{- 203} \quad (4 \times 16) \\ 27 \end{array}$ <p>OR</p>	Up to 2m	<p>Working must be carried through to reach a final answer for the award of ONE mark.</p> <p>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.</p>	6C7b	Calculations

Q	Requirement	Mark	Additional guidance	Content Domain Ref.	NC Strand
	$\begin{array}{r} 47\text{ r }6 \\ 29 \overline{) 1392} \\ - 116 \quad (4 \times 29) \\ \hline 232 \\ - 226 \quad (\text{error}) (8 \times 29) \\ \hline 6 \end{array}$ <p>• short division algorithm, e.g.</p> $\begin{array}{r} 46\text{ r }18 \\ 29 \overline{) 139192} \quad (\text{error}) \end{array}$				
33	$1\frac{3}{15}$	1m		6F4	Fractions
34	<p>Award TWO marks for the correct answer of 350 262</p> <p>If the answer is incorrect, award ONE mark for the formal method of long multiplication with no more than ONE arithmetical error, e.g.</p> $\begin{array}{r} 6039 \\ \times \quad 58 \\ \hline 48312 \\ + 301950 \\ \hline 349262 \quad (\text{error}) \end{array}$ <p>OR</p> $\begin{array}{r} 6039 \\ \times \quad 58 \\ \hline 48012 \quad (\text{error}) \\ + 301950 \\ \hline 349962 \end{array}$	Up to 2m	<p>Working must be carried through to reach a final answer for the award of ONE mark.</p> <p>Do not award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens:</p> $\begin{array}{r} 6039 \\ \times \quad 58 \\ \hline 48312 \\ + 30195 \quad (\text{place value error}) \\ \hline 78507 \end{array}$	6C7a	Calculations
35	$\frac{6}{21}$	1m	Accept $\frac{12}{42}$ or equivalent fraction	6F5a	Fractions
36	$\frac{5}{24}$	1m	Accept equivalence	6F5b	Fractions