

KS2 SATs Paper

Arithmetic Practice Paper 1

Pack 5

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**.

$$29 + 486 =$$

1

1 mark

$$\frac{5}{7} - \frac{3}{7} =$$

11

1 mark

$$0 \times 308 =$$

7

1 mark

$$502 - 9 =$$

1

1 mark

$$\square = 144 \div 12$$

1

1 mark

$$48,426 + 2,715 =$$

1

1 mark

7		$= 4,053 - 701$	
			1 mark

8		$5 \times 9 \times 2 =$	
			1 mark

9		$48.67 + 15.5 =$	
			1 mark

10	$9^2 - 10 =$	1 mark

11	$105 = \square \times 7$	1 mark

12	$5 - 10 =$	1 mark

13	$3,600 \div 4 =$	 1 mark

14	$= 73.8 \div 100$	 1 mark

15	$300 \times 60 =$	 1 mark

16	$3,700,009 = 3,000,000 + \boxed{} + 9$	
		 1 mark

17	$\frac{1}{6} + \frac{5}{18} =$	
		 1 mark

18	$10 - 6.3 =$	
		 1 mark

19	$\begin{array}{r} 659 \\ \times 32 \\ \hline \end{array}$	Up to 2 marks
show your method		

20	$\frac{2}{5}$ of 1,000 =	1 mark

21	$1,000,000 - 1,001 =$	1 mark

22

$37 \overline{)555}$

Up to
2 marks

23

$42 \times 0.5 =$

1 mark

24

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

1 mark

25

$$7 - 6.408 =$$

1 mark

26

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

1 mark

27

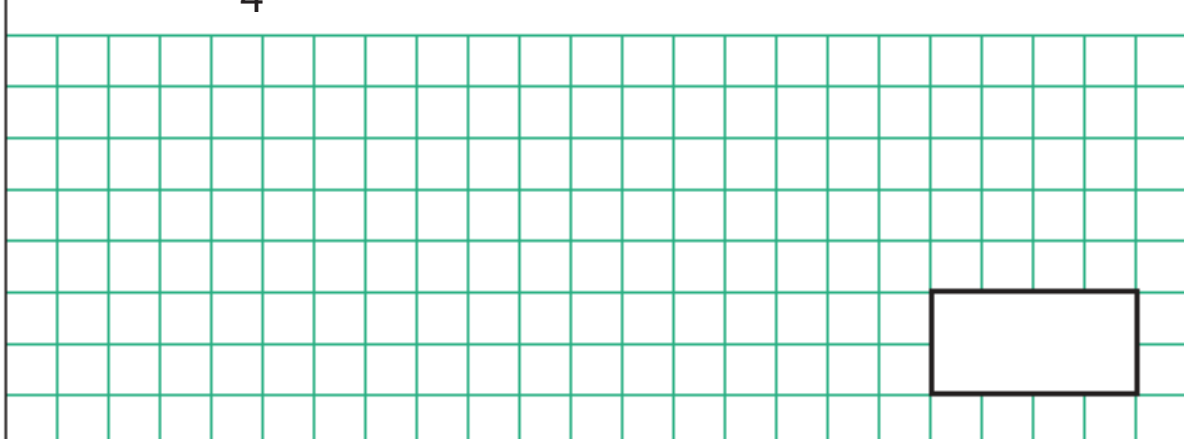
$$40 \times 2.7 =$$

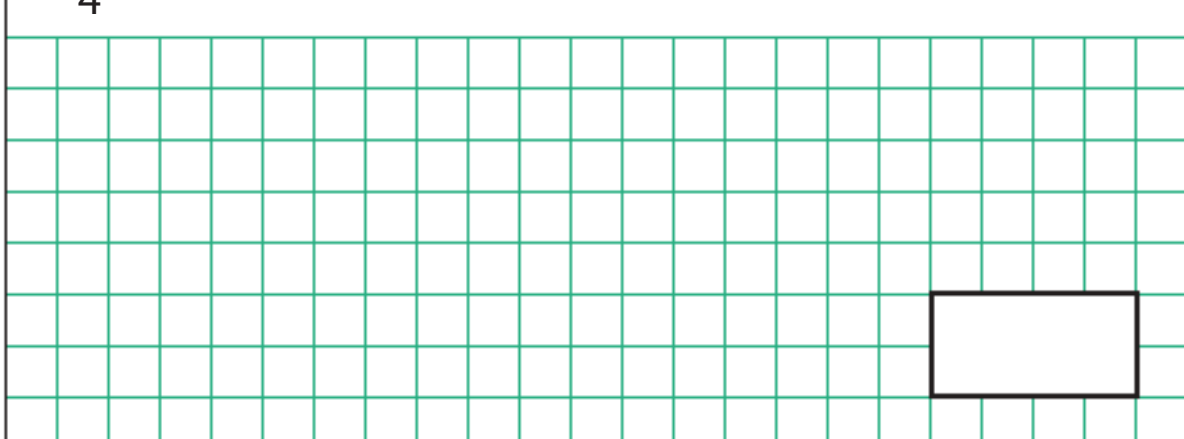
1 mark

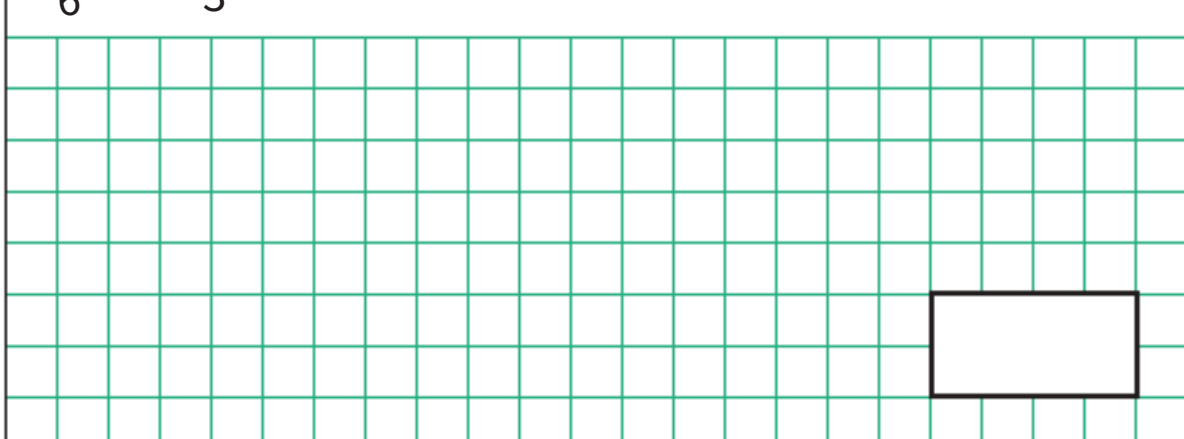
28	95% of 400																				 1 mark

29	$\begin{array}{r} 3684 \\ \times 76 \\ \hline \end{array}$																				 Up to 2 marks
	show your method 																				

30	$2\frac{1}{9} - \frac{2}{3} =$																				 1 mark

31	$20 \times 1 \frac{1}{4} =$	
		1 mark

32	$\frac{3}{4} \div 4 =$	
		1 mark

33	$\frac{5}{6} \times \frac{2}{3} =$	
		1 mark

34

$$5 \frac{1}{6} - 2 \frac{3}{4} =$$

1 mark

35

$$3^3 - 2 \times 3 =$$

1 mark

36

$$83 \overline{) 3984}$$

Up to
2 marks

Sample SATs Arithmetic Paper Mark Scheme

Q	Requirement	Mark	Additional guidance	Content Domain Ref	NC Strand
1	515	1m		3C2	Calculations
2	$\frac{2}{7}$	1m		3F4	Fractions
3	0	1m		3C7	Calculations
4	493	1m		3C1	Calculations
5	12	1m		4C6a	Calculations
6	51,141	1m		5C2	Calculations
7	3,352	1m		4C2	Calculations
8	90	1m		4C6b	Calculations
9	64.17	1m		4F8	Fractions
10	71	1m		5C5d	Calculations
11	15	1m		3C7	Calculations
12	-5	1m	Do not accept 5	6N6	Number
13	900	1m		4C6b	Calculations
14	0.738	1m		6F9a	Fractions
15	18,000	1m		5C6a	Calculations
16	700,000	1m		6N3	Number
17	$\frac{4}{18}$	1m	Accept $\frac{2}{9}$ or equivalent fraction	5F4	Fractions
18	3.7	1m		4F8, 4C2	Fractions, Calculations
19	Award TWO marks for the correct answer of 21,088 If the answer is incorrect, award ONE mark for the formal method of long multiplication with no more than ONE arithmetical error, e.g. $\begin{array}{r} 659 \\ \times 32 \\ \hline 1318 \\ 19770 \\ \hline 20088 \text{ (error)} \end{array}$	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: $\begin{array}{r} 659 \\ \times 32 \\ \hline 1318 \\ 1977 \text{ (place value error)} \\ \hline 3295 \end{array}$	6C7a	Calculations

Q	Requirement	Mark	Additional guidance	Content Domain Ref	NC Strand
19 (cont.)	or $ \begin{array}{r} 659 \\ \times 32 \\ \hline 1308 \text{ (error)} \\ 19770 \\ \hline 21078 \end{array} $				
20	400	1m		5F5	Fractions
21	998,999	1m		5C2	Calculations
22	Award TWO marks for the correct answer of 15 If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetical error, i.e. long division algorithm, e.g. $ \begin{array}{r} 15 \text{ r } 5 \\ 37 \overline{) 555} \\ - 370 \quad (10 \times 37) \\ \hline 185 \\ - 180 \text{ (error) } (5 \times 37) \\ \hline 5 \end{array} $ or $ \begin{array}{r} 15 \text{ r } 10 \\ 37 \overline{) 555} \\ - 37 \quad (10 \times 37) \\ \hline 195 \text{ (error)} \\ - 185 \quad (5 \times 37) \\ \hline 10 \end{array} $ short division algorithm, e.g. $ \begin{array}{r} 15 \text{ r } 8 \text{ (error)} \\ 37 \overline{) 555} \\ \hline 185 \end{array} $	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.	6C7b	Calculations
23	21	1m		6F9B	Fractions
24	% ₂₀	1m	Accept equivalence	6F4	Fractions
25	0.592	1m		5F8	Fractions

Q	Requirement	Mark	Additional guidance	Content Domain Ref	NC Strand
26	$5\frac{3}{5}$	1m	Accept equivalence	6F4	Fractions
27	108	1m		6F9b	Fractions
28	380	1m		6R2	Ratio
29	Award TWO marks for the correct answer of 279,984 If the answer is incorrect, award ONE mark for the formal method of long multiplication with no more than ONE arithmetical error, e.g. $\begin{array}{r} 3\ 6\ 8\ 4 \\ \times \quad 7\ 6 \\ \hline 2\ 2\ 1\ 0\ 4 \\ 2\ 5\ 7\ 8\ 8\ 0 \\ \hline 2\ 7\ 8\ 9\ 8\ 4 \text{ (error)} \end{array}$ or $\begin{array}{r} 3\ 6\ 8\ 4 \\ \times \quad 7\ 6 \\ \hline 2\ 2\ 0\ 8\ 4 \text{ (error)} \\ 2\ 5\ 7\ 8\ 8\ 0 \\ \hline 2\ 7\ 9\ 9\ 6\ 4 \end{array}$	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: $\begin{array}{r} 3\ 6\ 8\ 4 \\ \times \quad 7\ 6 \\ \hline 2\ 2\ 1\ 0\ 4 \\ 2\ 5\ 7\ 8\ 8 \text{ (place value error)} \\ \hline 4\ 7\ 8\ 9\ 2 \end{array}$	5C7a	Calculations
30	$1\frac{4}{9}$	1m	Accept equivalence	6F4	Fractions
31	25	1m		5F5	Fractions
32	$\frac{3}{16}$	1m	Accept equivalence	6F5b	Fractions
33	$\frac{5}{9}$	1m	Accept $\frac{10}{18}$ or equivalent fraction	6F5a	Fractions
34	$2\frac{5}{12}$	1m	Accept $\frac{29}{12}$ or equivalent fraction	6F4	Fractions
35	21	1m		6C9 , 5C5d	Calculations
36	Award TWO marks for the correct answer of 48 If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetical error, i.e.		Working must be carried through to reach a final answer for the award of ONE mark. Sometimes an error in calculation leads to a remainder which equals the truncated decimal equivalent. In such cases when the remainder is expressed as a decimal, evidence of working.	6C7b	Calculations

Q	Requirement	Mark	Additional guidance	Content Domain Ref	NC Strand
36 (cont.)	long division algorithm, e.g. $ \begin{array}{r} 47 \text{ r } 79 \\ 83 \overline{) 3984} \\ \underline{- 3320} \quad (10 \times 83) \\ 660 \quad (\text{error}) \\ \underline{- 581} \quad (7 \times 83) \\ 79 \end{array} $ or $ \begin{array}{r} 48 \text{ r } 2 \\ 83 \overline{) 3984} \\ \underline{- 332} \quad (10 \times 83) \\ 664 \\ \underline{- 662} \quad (\text{error}) \quad (8 \times 83) \\ 2 \end{array} $ short division algorithm, e.g. $ \begin{array}{r} 48 \text{ r } 1 \quad (\text{error}) \\ 83 \overline{) 3984} \end{array} $	Up to 2m	leading to the decimal must be seen in order to condone the possible notation error. 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.		