

Pack B - Paper 1: Arithmetic Mark Scheme

Qu	Requirement	Mark	Additional guidance
1	400	1m	
2	336	1m	
3	90	1m	
4	1,824	1m	
5	7,610	1m	
6	794	1m	
7	11.314	1m	
8	5,020	1m	
9	$\frac{12}{28}$	1m	Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{6}{14}$ or $\frac{3}{7}$ or 0.428571 (accept any unambiguous indication of the recurring digits). Do not accept rounded or truncated decimals.
10	1,400	1m	
11	800	1m	
12	1,793	1m	
13	45	1m	
14	300	1m	
15	$\frac{8}{12}$	1m	Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{4}{6}$ or $\frac{2}{3}$ or 0.6 (accept any unambiguous indication of the recurring digits). Do not accept rounded or truncated decimals.
16	0.002	1m	
17	47	1m	
18	$\frac{1}{20}$	1m	Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{5}{100}$ or 0.05 Do not accept rounded or truncated decimals.
19	33.947	1m	

Qu	Requirement	Mark	Additional guidance
20	$\frac{10}{12}$	1m	Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{5}{6}$ or $0.8\dot{3}$ (accept any unambiguous indication of the recurring digits). Do not accept rounded or truncated decimals.
21	65	1m	
22	<p>Award TWO marks for the correct answer of 19,684</p> <p>If the answer is incorrect, award ONE mark for the formal method of long multiplication with no more than ONE arithmetic error, e.g.</p> $\begin{array}{r} 703 \\ \times 28 \\ \hline 5624 \\ 14060 \\ \hline 19694 \text{ (error)} \end{array} \quad \text{OR} \quad \begin{array}{r} 703 \\ \times 28 \\ \hline 5604 \text{ (error)} \\ 14060 \\ \hline 19664 \end{array}$	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 the tens.</p> $\begin{array}{r} 703 \\ \times 28 \\ \hline 5624 \\ 1406 \text{ (place value error)} \\ \hline 7030 \end{array}$
23	$2\frac{2}{5}$ OR $\frac{12}{5}$	1m	Accept equivalent mixed numbers, fractions or the exact decimal equivalent, e.g. 2.4 Do not accept rounded or truncated decimals.
24	592	1m	Do not accept 592%
25	915	1m	
26	<p>Award TWO marks for the correct answer of 117,728</p> <p>If the answer is incorrect, award ONE mark for the formal method of long multiplication with no more than ONE arithmetic error, e.g.</p> $\begin{array}{r} 4528 \\ \times 26 \\ \hline 27168 \\ 90560 \\ \hline 107728 \text{ (error)} \end{array} \quad \text{OR} \quad \begin{array}{r} 4528 \\ \times 26 \\ \hline 27128 \text{ (error)} \\ 90560 \\ \hline 117688 \end{array}$	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 the tens.</p> $\begin{array}{r} 4528 \\ \times 26 \\ \hline 27168 \\ 9056 \text{ (place value error)} \\ \hline 36224 \end{array}$
27	$1\frac{1}{2}$ OR $\frac{3}{2}$	1m	Accept equivalent mixed numbers, fractions or the exact decimal equivalent, e.g. $\frac{9}{6}$ or $1\frac{3}{6}$ or 1.5 Do not accept rounded or truncated decimals.



Qu	Requirement	Mark	Additional guidance
28	55.2	1m	
29	<p>Award TWO marks for a correct answer of 27. If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetic error, e.g.</p> <p>Long division, e.g.</p> $\begin{array}{r} 27 \text{ r } 4 \\ 28 \overline{) 756} \\ - 56 \\ \hline 196 \\ - 192 \text{ (error)} \\ \hline 4 \end{array} \quad \text{OR} \quad \begin{array}{r} 28 \text{ (error)} \\ 28 \overline{) 756} \\ - 56 \\ \hline 196 \\ - 196 \\ \hline 0 \end{array}$ <p>Short division, e.g.</p> $\begin{array}{r} 2 \text{ } 8 \text{ (error)} \\ 28 \overline{) 75 \overset{19}{6}} \end{array}$	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.</p> <p>The carrying figure must be less than the divisor.</p>
30	$1\frac{1}{24}$ OR $\frac{25}{24}$	1m	<p>Accept equivalent mixed numbers, fractions or the exact decimal equivalent, e.g. 1.0416</p> <p>Do not accept rounded or truncated decimals.</p>
31	294	1m	
32	$\frac{3}{48}$	1m	<p>Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{1}{16}$ or 0.0625</p> <p>Do not accept rounded or truncated decimals.</p>
33	33.6	1m	
34	261	1m	Do not accept 261%
35	300	1m	
36	<p>Award TWO marks for a correct answer of 184. If the answer is incorrect, award ONE mark for the formal methods of division with no more than ONE arithmetic error, e.g.</p> <p>Long division, e.g.</p> $\begin{array}{r} 184 \text{ r } 2 \\ 31 \overline{) 5704} \\ - 31 \\ \hline 260 \\ - 248 \\ \hline 124 \text{ (error)} \\ - 122 \\ \hline 2 \end{array} \quad \text{OR} \quad \begin{array}{r} 183 \text{ (error)} \\ 31 \overline{) 5704} \\ - 31 \\ \hline 260 \\ - 248 \\ \hline 124 \\ - 124 \\ \hline 0 \end{array}$ <p>Short division, e.g.</p> $\begin{array}{r} 2 \text{ } 8 \text{ (error)} \\ 31 \overline{) 57 \overset{26}{0} \overset{12}{4}} \end{array}$	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.</p> <p>The carrying figure must be less than the divisor.</p>