Year 6 Paper 2: Arithmetic Mark Scheme

Qu	Requirement	Mark	Additional guidance
1	2060	1m	
2	2,717	1m	
3	$\frac{3}{4}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, *e.g.* $\frac{6}{8}$ or 0.75 **Do not** accept rounded or truncated decimals.
4	982	1m	
5	4.607	1m	
6	735	1m	
7	396	1m	
8	60	1m	
9	4,700	1m	
10	8,471	1m	
11	1,698	1m	
12	$\frac{1}{8}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, *e.g.* $\frac{4}{32}$ or 0.125 **Do not** accept rounded or truncated decimals.
13	$\frac{2}{5}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, *e.g.* $\frac{6}{15}$ or 0.4 **Do not** accept rounded or truncated decimals.
14	3,104	1m	
15	34	1m	
16	0.8	1m	
17	73	1m	
18	18,000	1m	
19	5.92	1m	
20	5,873,000	1m	

Qu	Requirement	Mark	Additional guidance
21	Award **TWO** marks for a correct answer of 48. If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetic error, *e.g.* Long division, *e.g.* $\begin{array}{r} 48\text{ r }2 \\ 19\overline{)912} \\ -\ 76 \\ \hline 152 \\ -\ 150 \\ \hline 2 \end{array}$ (error) **OR** $\begin{array}{r} 47\text{ (error)} \\ 19\overline{)912} \\ -\ 76 \\ \hline 152 \\ -\ 152 \\ \hline 0 \end{array}$ Short division, *e.g.* $\begin{array}{r} 4\ \ 7\text{ (error)} \\ 18\overline{)91\,{}^{15}2} \end{array}$	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.
22	$\frac{1}{9}$	1m	Accept equivalent fractions or the exact decimal equivalent, *e.g.* $\frac{3}{27}$ or $0.\dot{1}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
23	83.617	1m	
24	Award **TWO** marks for the correct answer of 25,456 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, *e.g.* $\begin{array}{r} 592 \\ \times\ 43 \\ \hline 1776 \\ 23680 \\ \hline 25446 \end{array}$ (error) **OR** $\begin{array}{r} 592 \\ \times\ 43 \\ \hline 1766 \\ 23680 \\ \hline 25446 \end{array}$ (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 the tens. $\begin{array}{r} 592 \\ \times\ 43 \\ \hline 1776 \\ 2368 \\ \hline 4144 \end{array}$ (place value error)
25	$1\frac{3}{35}$ **OR** $\frac{38}{35}$	1m	Accept equivalent mixed numbers, fractions or the **exact** decimal equivalent, *e.g.* $1.0\overline{857142}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
26	$\frac{1}{7}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, *e.g.* $\frac{3}{21}$ or $0.\overline{142857}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.

Qu	Requirement	Mark	Additional guidance
27	Award **TWO** marks for the correct answer of 197,486 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, e.g. 5197 x 38 = 41576, 155910, 196486 (error) **OR** 5197 x 38 = 41556 (error), 155910, 197466	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 the tens. 5197 x 38 = 41576, 15591 (place value error), 57167
28	$\frac{5}{27}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $0.\overline{185}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
29	108	1m	**Do not** accept 108%
30	$2\frac{3}{28}$	1m	Accept equivalent mixed numbers or the **exact** decimal equivalent, e.g. $2.\overline{10714285}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
31	$\frac{1}{6}$	1m	Accept equivalent fractions or the exact decimal equivalent, e.g. $0.1\dot{6}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
32	272	1m	**Do not** accept 272%
33	1,050	1m	
34	320	1m	**Do not** accept 320%
35	35	1m	**Do not** accept $\frac{175}{5}$
36	Award **TWO** marks for a correct answer of 98. If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetic error, e.g. Long division, e.g. 98 r 2; 64 | 6272; - 576; 512; - 510 (error); 2 **OR** 97 (error); 64 | 6272; - 576; 512; - 512; 0 Short division, e.g. 9 7 (error); 64 | 627 5 12	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.