Year 6 Paper 3: Arithmetic Mark Scheme

Qu	Requirement	Mark	Additional guidance
1	8042	1m	
2	424	1m	
3	16.249	1m	
4	30	1m	
5	10,219	1m	
6	80	1m	
7	800	1m	
8	0	1m	
9	183	1m	
10	23	1m	
11	16	1m	
12	503	1m	
13	1,627	1m	
14	110	1m	
15	8	1m	
16	9	1m	
17	204,000	1m	
18	2,000	1m	**Do not** accept 2,000%
19	7.58	1m	
20	8.2	1m	
21	0.0008	1m	
22	$\frac{3}{5}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $\frac{15}{25}$ or 0.6 **Do not** accept rounded or truncated decimals.

Qu	Requirement	Mark	Additional guidance
23	$1\frac{3}{20}$ OR $\frac{23}{20}$	1m	Accept equivalent mixed numbers, fractions or the **exact** decimal equivalent, e.g. 1.15 **Do not** accept rounded or truncated decimals.
24	Award **TWO** marks for the correct answer of 34,846 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, e.g. 917 x 38 7336 27510 24846 (error) **OR** 917 x 38 7236 (error) 27510 34746	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. 917 x 38 7336 2751 (place value error) 10087
25	546	1m	**Do not** accept 546%
26	$1\frac{4}{15}$ OR $\frac{19}{15}$	1m	Accept equivalent mixed number, fractions or the **exact** decimal equivalent, e.g. $1.2\dot{6}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
27	Award **TWO** marks for a correct answer of 23. 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. 23 r 2 24 (error) 29)667 29)667 - 58 **OR** - 58 87 87 - 85 (error) - 87 2 0 Short division, e.g. 2 4 (error) 29)66 ⁸7	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.
28	$\frac{23}{88}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $0.26\overline{136}$ (accept any unambiguous indication of the recurring digits) **Do not** accept rounded or truncated decimals.

Qu	Requirement	Mark	Additional guidance
29	936	1m	**Do not** accept 936%
30	Award **TWO** marks for the correct answer of 176,587 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, e.g. 2419 x 73 7257 169330 **OR** 166587 (error) 2419 x 73 7357 (error) 169330 176687	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. 2419 x 73 7257 17933 (place value error) 25190
34	$3\frac{8}{15}$ **OR** $\frac{53}{15}$	1m	Accept equivalent mixed numbers, fractions or the **exact** decimal equivalent, e.g. $3.5\dot{3}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
31	$\frac{1}{14}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $0.\overline{714285}$ (accept any unambiguous indication of the recurring digits) **Do not** accept rounded or truncated decimals.
32	216	1m	**Do not** accept 216%
33	20	1m	**Do not** accept $\frac{60}{3}$
33	180	1m	**Do not** accept $\frac{540}{3}$
36	Award **TWO** marks for a correct answer of 87. 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. 87 r 1 93 ⟌ 8091 - 744 651 - 650 (error) **OR** 1 88 (error) 93 ⟌ 8091 - 744 651 - 651 0 Short division, e.g. 8 8 (error) 93 ⟌ 809⁶⁵1	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.