Year 6 Paper 1: Arithmetic Mark Scheme

Qu	Requirement	Mark	Additional guidance
1	831	1m	
2	315	1m	
3	$\frac{7}{9}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $\frac{63}{81}$ or $0.\dot{7}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
4	0	1m	
5	150	1m	
6	12	1m	
7	137.07	1m	
8	29	1m	
9	7,909	1m	
10	90	1m	
11	300	1m	
12	987	1m	
13	8.1	1m	
14	4,000	1m	
15	70	1m	
16	9,055	1m	
17	$\frac{11}{15}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $\frac{55}{75}$ or $0.7\dot{3}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
18	1,200	1m	
19	510	1m	**Do not** accept 510%
20	0.0024	1m	

Qu	Requirement	Mark	Additional guidance
21	Award **TWO** marks for the correct answer of 17,986 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, e.g. 529 x 34 2116 15870 17976 (error) **OR** 529 x 34 2106 (error) 15870 17976	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. 529 x 34 2116 1587 (place value error) 3703
22	Award **TWO** marks for a correct answer of 17. 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. 17 r 2 32 ⟌ 544 - 32 224 - 222 (error) 2 **OR** 18 (error) 32 ⟌ 544 - 32 224 - 224 0 Short division, e.g. 1 8 (error) 32 ⟌ 54 22 4	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.
23	$\frac{11}{12}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $0.91\dot{6}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
24	32.4	1m	
25	$1\frac{31}{35}$ **OR** $\frac{66}{25}$	1m	Accept equivalent mixed numbers, fractions or the **exact** decimal equivalent, e.g. $1.\overline{8857142}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
26	108	1m	
27	2.998	1m	

Qu	Requirement	Mark	Additional guidance
28	$\frac{2}{3}$	1m	Accept equivalent fractions or the exact decimal equivalent, e.g. $\frac{8}{12}$, $\frac{32}{48}$, $0.\dot{6}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
29	336	1m	**Do not** accept 336%
30	Award **TWO** marks for the correct answer of 453,176 If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, e.g. 6124 x 74 = 24496, 428680, 453076 (error) **OR** 6124 x 74 = 24486 (error), 428680, 453166	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. 6124 x 74 = 24496, 42868 (place value error), 67364
31	$\frac{2}{15}$	1m	Accept equivalent fractions or the **exact** decimal equivalent, e.g. $0.1\dot{3}$ (accept any unambiguous indication of the recurring digits). **Do not** accept rounded or truncated decimals.
32	60	1m	
33	30	1m	**Do not** accept $\frac{60}{2}$
34	$2\frac{7}{40}$ **OR** $\frac{87}{40}$	1m	Accept equivalent mixed numbers, fractions or the **exact** decimal equivalent, e.g. 2.175 **Do not** accept rounded or truncated decimals.
35	273	1m	**Do not** accept 273%
36	Award **TWO** marks for a correct answer of 74. 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. 89 ⟌ 6586 = 74 r 6; − 623; 356; − 350 (error); 6 **OR** 89 ⟌ 6586 = 75 (error); − 623; 356; − 356; 0 Short division, e.g. 89 ⟌ 658[35]6 = 7 5 (error)	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.