Year 6 Extension Arithmetic Test 1

testbase

1	16 − 20 =	1 mark
2	236 − 30 × 6 =	1 mark
3	368,701 + 10,000 + 10,000 =	1 mark
4	2,954 × 9 =	1 mark
5	8,253 ÷ 4 =	1 mark
6	3,300 ÷ 30 =	1 mark
7	328,088 + 75,253 =	1 mark
8	42,000 ÷ 70 =	1 mark

9	$\frac{1}{7} \times \frac{1}{3} =$	1 mark
10	$\begin{array}{r} 75.83 \\ \times \quad 5 \\ \hline \end{array}$	1 mark
11	56.97 + 8.152 =	1 mark
12	99,999 + 200 =	1 mark
13	$1^3 + 2^3 + 4^2 =$	1 mark
14	600 × 40 =	1 mark
15	99,999 − 5,000 =	1 mark
16	$\begin{array}{r} 636{,}342 \\ - \ 217{,}838 \\ \hline \end{array}$	1 mark

17	444,005 − ? = 22,006	1 mark
18	6.3 ÷ 100 =	1 mark
19	0.3 × 12 =	1 mark
20	340.27 − 3.905 =	1 mark
21	80 × 120 =	1 mark
22	238.1 × 1000 =	1 mark
23	50 × 80 − 40 =	1 mark
24	8 + 7 × 3 − 4 =	1 mark

25	$\begin{array}{r} 476 \\ \times\ 83 \\ \hline \end{array}$	2 marks
26	$\frac{2}{3} + \frac{5}{12} =$	1 mark
27	$\frac{5}{8} \times 9 =$	1 mark
28	$\begin{array}{r} 3678 \\ \times\ 29 \\ \hline \end{array}$	2 marks
29	$42.3 \div 5 =$	1 mark
30	$36\overline{)7521} =$	2 marks
31	$\frac{5}{4} - \frac{5}{6} =$	1 mark
32	$5\% = \frac{?}{20}$	1 mark

33	42% of 90 =	1 mark
34	$\frac{6}{7} \div 2 =$	1 mark
35	$0.6 = \frac{?}{20}$	1 mark
36	$3\frac{1}{8} - \frac{1}{4} =$	1 mark
37	$2\frac{2}{5} \times 4 =$	1 mark

Mark scheme

1. −4 **[1]**

2. 56 **[1]**

3. 388,701 **[1]**

4. 26,586 **[1]**

5. 2,063 rem 1 or equivalent e.g. 2,063.25 **[1]**

6. 110 **[1]**

7. 403,341 **[1]**

8. 600 **[1]**

9. $\frac{1}{21}$ **[1]**

10. 379.15 **[1]**

11. 65.122 **[1]**

12. 100,199 **[1]**

13. 25 **[1]**

Accept 5^2

14. 24,000 **[1]**

15. 94,999 **[1]**

16. 418,504 **[1]**

17. 421,999 **[1]**

18. 0.063 **[1]**

19. 3.6 **[1]**

20. 336.365 **[1]**

21. 9,600 **[1]**

22. 238,100 **[1]**

23. 3,960 **[1]**

24. 25 **[1]**

25. *For 2 marks*: 39,508 **[2]**

For 1 mark:

$$\begin{array}{r} 476 \\ \times\ 83 \\ \hline 1428 \\ \underline{38080} \\ 39508 \end{array}$$

An error in one *row, then added correctly,* ***or*** *an error in the addition*

26. $1\frac{1}{12}$ or equivalent **[1]**

e.g. $\frac{13}{12}$

27. $5\frac{5}{8}$ or equivalent **[1]**

e.g. $\frac{45}{8}$

Do not *accept unconventional mixed numbers e.g.* $4\frac{13}{8}$

28. *For 2 marks*: 106,662 **[2]**

For 1 mark:

$$\begin{array}{r} 3678 \\ \times\ 29 \\ \hline 33102 \\ \underline{73560} \\ 106662 \end{array}$$

An error in one *row, then added correctly,* ***or*** *an error in the addition*

29. 8.46 **[1]**

30. *For 2 marks*: **[2]**

208 rem 33 or equivalent

For 1 mark:

Evidence of either long division or short division method with only one error (carry figures must be seen in a short division method).

31. $\frac{5}{12}$ or equivalent **[1]**

32. $\frac{1}{20}$ **[1]**

33. 37.8 **[1]**

34. $\frac{3}{7}$ **[1]**

35. $\frac{12}{20}$ **[1]**

36. $2\frac{7}{8}$ or equivalent **[1]**

e.g. $\frac{23}{8}$

Do not *accept unconventional mixed numbers e.g.* $1\frac{15}{8}$

37. $9\frac{3}{5}$ or equivalent **[1]**

e.g. $\frac{48}{5}$

Do not *accept unconventional mixed numbers e.g.* $8\frac{8}{5}$