Name: Date:

/40 total marks

Maths Assessment Year 4 Term 3: Multiplication and Division

1. Recall multiplication and division up to 12 x 12.

Answer the questions your teacher reads out loud. Just write the answer.

1	18 ✓	6	45 ✓	11	12 ✓	16	90 ✓
2	8 ✓	7	18 ✓	12	35 ✓	17	1 ✓
3	18 ✓	8	6 ✓	13	72 ✓	18	30 ✓
4	72 ✓	9	48 ✓	14	6 ✓	19	132 ✓
5	9 ✓	10	54 ✓	15	42 ✓	20	11 ✓

10 / 10 marks

2. Use place value, known and derived facts to multiply and divide mentally, including: dividing by 1; multiplying together three numbers.

a) Answer the questions your teacher reads out loud. Just write the answer.

1	150 ✓	6	40 ✓
2	160 ✓	7	490 ✓
3	200 ✓	8	1500 ✓
4	270 ✓	9	300 ✓
5	300 ✓	10	240 ✗

5 / 5 marks

b) Multiply these numbers together:

2 x 6 x 2	24 ✓
5 x 4 x 3	60 ✓
7 x 2 x 8	112 ✓
1 x 349	349 ✓
7 x 2 x 10	140 ✓
5 x 5 x 5	125 ✓

6 / 6 marks

21 / Total for this page

3. Recognise and use factor pairs and commutativity in mental calculations.

a) Write all the factors of 60

1 x 60, 2 x 30, 6 x 10, 3 x 20, 4 x 15, 5 x 12

3 marks

b) Which two **factors** of 42 have a total of 13?

6 and 7

1 mark

c) Tick the calculations that have the same answer to 4 x 8 x 3.

8 x 4 x 3	12 x 4	3 x 32	8 x 5 x 3	3 x 8 x 4
☑	☐	☑	☐	☑

2 marks

d) Write the following calculation in 5 other ways:

9 x 2 x 5

2 x 9 x 5

5 x 9 x 2

2 x 5 x 9

5 x 2 x 9

9 x 5 x 2

3 marks

4. Multiply 2 digit and 3 digit numbers by a 1 digit number using formal written layout.

Use written methods to complete these calculations. Show your working out:

78 x 3

78 x 3 = 234

234

64 x 8

64 x 8 = 512

512

149 x 5

149 x 5 = 745

745

516 x 4

516 x 4 = 2064

2064

4 marks

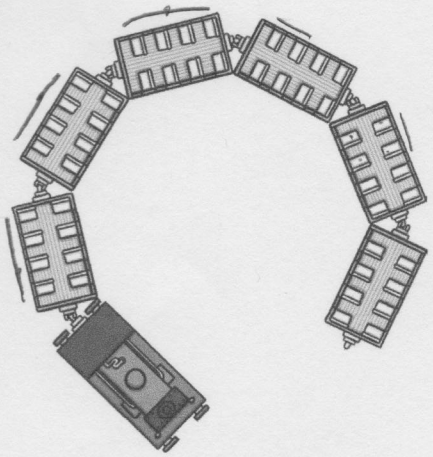
13

Total for this page

5. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as *n* objects are connected to *m* objects.

Solve the following problems:

a) A train has 6 carriages, each with 8 seats. Tickets are £3 for adults and £2 for children. On one journey, three carriages are full, two are half full and one is empty. How many passengers are on the train? Show your working out.



$3 \times 8 = 24$

$2 \times 4 = 8$

$24 + 8 = 32$

32 ✓

2 marks

b) On another journey there are 42 passengers. 16 are adults and the rest are children. How much is paid for the tickets? Show your working out.

calculation inverse

$$\begin{array}{r} 3\,1 \\ 4\,2 \\ -\,1\,6 \\ \hline 2\,6 \end{array} \qquad \begin{array}{r} 2\,6 \\ +\,1\,6 \\ \hline 4\,2 \\ 1 \end{array}$$

16 adults × £3 = £48

26 children × £2 = £52

$$\begin{array}{r} 1\,6 \\ \times\ 3 \\ \hline 4\,8 \\ 1 \end{array} \qquad \begin{array}{r} 2\,6 \\ \times\ 2 \\ \hline 5\,2 \\ 1 \end{array} \qquad \begin{array}{r} 4\,8 \\ +\,5\,2 \\ \hline 1\,0\,0 \\ 1 \end{array}$$

£100 ✓

2 marks

Total for this page

c) Two new carriages are added to the train. If carrying adults, how much more money can be made on each journey?

1 carriage carries 8 adults

2 carriages carry $2 \times 8 = 16$ adults

$$\begin{array}{r} 16 \\ \times \quad 3 \\ \hline 48 \\ \hline 1 \end{array}$$

£48

2

2 marks

2

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