

SOLUTIONS

11

Edexcel GCSE

Mathematics (Linear) – 1MA0

MULTIPLICATION AND DIVISION

Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.
Tracing paper may be used.

Items included with question papers

Nil

Instructions

Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number.

Answer all questions.

Answer the questions in the spaces provided – there may be more space than you need.

Calculators may be used.

Information

The marks for each question are shown in brackets – use this as a guide as to how much time to spend on **each** question.

Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

Advice

Read each question carefully before you start to answer it.

Keep an eye on the time.

Try to answer every question.

Check your answers if you have time at the end.

1. Work out 362×54
You **must** show all your working.

X	300	60	2
50	15000	3000	100
4	1200	240	8

$$\begin{array}{r}
 100 \\
 15000 \\
 3000 \\
 1200 \\
 240 \\
 8 \\
 \hline
 19548
 \end{array}$$

$$\underline{\underline{19548}}$$

(Total 3 marks)

2. Work out 736×24

You **must** show all your working.

X	700	30	6
20	14000	600	120
4	2800	120	24

$$\begin{array}{r}
 14000 \\
 2800 \\
 600 \\
 120 \\
 120 \\
 24 \\
 \hline
 17664
 \end{array}$$

$$\underline{\underline{17664}}$$

(Total 3 marks)

3. Richard paid 56p for 7 pencils.
The cost of each pencil was the same.
Work out the cost of 4 of these pencils.

$$56 \div 7 = 8$$

$$8 \times 4 = 32$$

.....32..... p
(Total 2 marks)

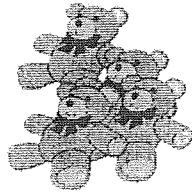
4. 487 is divided by 23
What is the remainder?

You **must** show all your working.

$$\begin{array}{r} 21 \text{ r } 4 \\ 23 \overline{) 487} \\ \underline{46} \\ 27 \\ \underline{23} \\ 4 \end{array}$$

.....4.....
(Total 2 marks)

7. Fatima bought 48 teddy bears at £9.55 each.



(a) Work out the total amount she paid.

	900	50	5
40	36000	2000	200
8	7200	400	40

$$\begin{array}{r}
 36000 \\
 7200 \\
 2000 \\
 400 \\
 200 \\
 40 \\
 \hline
 45840
 \end{array}$$

£ 458.40

(3)

Fatima sold all the teddy bears for a total of £696.

She sold each teddy bear for the same price.

(b) Work out the price at which Fatima sold each teddy bear.

$$\begin{array}{r}
 14.50 \\
 48 \overline{) 696.0} \\
 \underline{48} \\
 216 \\
 \underline{192} \\
 240
 \end{array}$$

$$\begin{array}{r}
 48 \\
 \times 34 \\
 \hline
 192
 \end{array}$$

£ 14.50

(3)

5. Work out $1572 \div 0.3$

You **must** show all your working.

$$15720 \div 3$$

$$\begin{array}{r} 5240 \\ 3 \overline{) 15720} \end{array}$$

$$\dots\dots 5,240$$

(Total 2 marks)

6. Work out 286×43

	200	80	6
40	8000	3200	240
3	600	240	18

$$\begin{array}{r} 8000 \\ 3200 \\ 240 \\ 600 \\ 240 \\ 18 \\ \hline 12298 \end{array}$$

$$\dots\dots 12,298$$

(Total 3 marks)

(Total 6 marks)

8. Nick takes 26 boxes out of his van.
The weight of each box is 32.9 kg.

- (a) Work out the **total** weight of the 26 boxes.

x	300	20	9
20	6000	400	180
6	1800	120	54

$$\begin{array}{r} 6000 \\ 400 \\ 180 \\ 1800 \\ 120 \\ \hline 154 \\ \hline 855.4 \end{array}$$

.....855.4 kg

(3)

Then Nick fills the van with large wooden crates.
The weight of each crate is 69 kg.
The greatest weight the van can hold is 990 kg.

- (b) Work out the greatest number of crates that the van can hold.

$$\begin{array}{r} 69 \\ \times 34 \\ \hline 276 \end{array}$$

$$\begin{array}{r} 14 \\ 69 \overline{) 990} \\ \underline{69} \\ 300 \end{array}$$

.....14.....

(4)

(Total 7 marks)

9. The cost of a calculator is £6.79
Work out the cost of 28 of these calculators.

X	600	70	9
20	12000	1400	180
8	4800	560	72

12000
4800
1400
-560
180
72
22
19012

£.190.12.....

(Total 3 marks)

10. Work out 3.15×24

X	300	10	5
20	6000	200	100
4	1200	40	20

6000
1200
200
100
40
20

7560

75.6

(Total 3 marks)

11. 'Jet Tours' has an aeroplane that will carry 27 passengers.

Each of the 27 passengers pays £55 to fly from Liverpool to Prague.

Work out the total amount that the passengers pay.

	50	5
20	1000	100
7	350	35

$$\begin{array}{r}
 1000 \\
 350 \\
 100 \\
 35 \\
 \hline
 1485
 \end{array}$$

£ 1485.....

(Total 2 marks)

12.

<p>Canal boat for hire £1785.00 for 14 days</p>

What is the cost **per day** of hiring the canal boat?

$$\begin{array}{r}
 14 \\
 \times 27 \\
 \hline
 98
 \end{array}$$

$$\begin{array}{r}
 127.5 \\
 14 \overline{) 1785.0} \\
 \underline{14} \\
 38 \\
 \underline{28} \\
 105 \\
 \underline{98} \\
 70
 \end{array}$$

£ 127.50.....

(Total 3 marks)