

GCSE Edexcel Maths 1MA1 Arithmetic

Question Paper

"We will help you to

achieve A Star "



Here is part of Gary's electricity bill.

Electricity bill

New reading 7155 units Old reading 7095 units

Price per unit 15p

Work out how much Gary has to pay for the units of electricity he used.

[4 marks]

Question 2

(b)
$$331705 \div 1.85$$

[1 mark]



The diagram shows a patio in the shape of a rectangle.

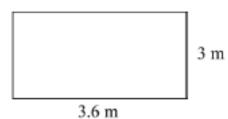


Diagram NOT accurately drawn

The patio is 3.6 m long and 3 m wide.

Matthew is going to cover the patio with paving slabs. Each paving slab is a square of side 60 cm.

Matthew buys 32 of the paving slabs.

(a) Does Matthew buy enough paving slabs to cover the patio? You must show all your working.

[3 marks]

Question 4

Use the fact that

$$5.4 \times 36 = 194.4$$

to find the value of

(i)
$$5.4 \times 3.6$$

(ii)
$$54 \times 360$$

[2 marks]



A rectangle has an area of 4 m^2 .

Write this area in cm².

[2 marks]

Question 6

Given that $1793 \times 185 = 331705$

write down the value of

(a) 1.793×185

[1 mark]

Question 7

Write down the reciprocal of 5

[1 mark]



One sheet of paper is 9×10^{-3} cm thick.

Mark wants to put 500 sheets of paper into the paper tray of his printer. The paper tray is 4 cm deep.

Is the paper tray deep enough for 500 sheets of paper? You must explain your answer.

[3 marks]

Question 9

Train tickets

day return £6.45

monthly saver £98.50

Sue goes to work by train.

Sue worked for 18 days last month. She bought a day return ticket each day she worked.

A monthly saver ticket is cheaper than 18 day return tickets. How much cheaper?

[4 marks]



Yesterday it took 5 cleaners $4\frac{1}{2}$ hours to clean all the rooms in a hotel.

There are only 3 cleaners to clean all the rooms in the hotel today.

Each cleaner is paid £8.20 for each hour or part of an hour they work.

How much will each cleaner be paid today?

[3 marks]

Question 11

One sheet of A3 card has area $\frac{1}{8}$ m².

The card has a mass of 160 g per m².

Work out the total mass of 25 sheets of A3 card.

[4 marks]



Each day a company posts some small letters and some large letters.

The company posts all the letters by first class post.

The tables show information about the cost of sending a small letter by first class post and the cost of sending a large letter by first class post.

Small Letter

Weight	First Class Post
0-100 g	60p

Large Letter

Weight	First Class Post
0-100 g	£1.00
101–250 g	£1.50
251–500 g	£1.70
501–750 g	£2.50

One day the company wants to post 200 letters.

The ratio of the number of small letters to the number of large letters is 3:2

70% of the large letters weigh $0-100\,\mathrm{g}$.

The rest of the large letters weigh 101–250 g.

Work out the total cost of posting the 200 letters by first class post.

[5 marks]



Henry is thinking of having a water meter.

These are the two ways he can pay for the water he uses.

Water Meter

A charge of £28.20 per year

plus

91.22p for every cubic metre of water used

1 cubic metre = 1000 litres

No Water Meter

A charge of £107 per year

Henry uses an average of 180 litres of water each day.

Use this information to determine whether or not Henry should have a water meter.

[5 marks]



Saphia is organising a conference.

People at the conference will sit at circular tables.



Diagram **NOT** accurately drawn

Each table has a diameter of 140 cm. Each person needs 60 cm around the circumference of the table.

There are 12 of these tables in the conference room. A total of 90 people will be at the conference.

Are there enough tables in the conference room?

[4 marks]



The diagram shows a plan of Brian's lawn.

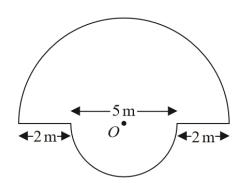


Diagram **NOT** accurately drawn

The edge of the lawn consists of two semicircles and two straight lines. Each semicircle has centre *O*.

The diameters of the semicircles are 9 m and 5 m.

Brian is going to put lawn edging around the edge of the lawn. Lawn edging is sold in 2.4 metre rolls.

Brian has £35

Has Brian got enough money to buy all the rolls of lawn edging he needs? You must show all your working.

Lawn edging

£3.99 per roll or 3 rolls for £10

[5 marks]