Estimation Past Paper Questions

Q1.

Work out an estimate for the value of $\dfrac{89.3 \times 0.51}{4.8}$

....

(Total for Question is 2 marks)

Q2.

Work out an estimate for $\dfrac{790 \times 289}{49}$

....

(Total for question = 3 marks)

Q3.

Work out an estimate for $\sqrt{4.98 + 2.16 \times 7.35}$

....

(Total for question = 3 marks)

Q4.

Work out an estimate for $\dfrac{31 \times 9.87}{0.509}$

....

(Total for Question is 3 marks)

Q5.

Work out an estimate for the value of $\dfrac{43.2 \times \sqrt{99.05}}{0.193}$

....

(Total for question = 3 marks)

Q6.

There are 892 litres of oil in Mr Aston's oil tank.
He uses 18.7 litres of oil each day.

Estimate the number of days it will take him to use all the oil in the tank.

....

(Total for question = 2 marks)

Q7.

Jayne writes down the following

$$3.4 \times 5.3 = 180.2$$

Without doing the exact calculation, explain why Jayne's answer cannot be correct.

....

....

(Total for question is 1 mark)

Q8.

A unit of gas costs 4.2 pence.

On average Ria uses 50.1 units of gas a week.
She pays for the gas she uses in 13 weeks.

(a) Work out an estimate for the amount Ria pays.

....

(3)

(b) Is your estimate to part (a) an underestimate or an overestimate?
Give a reason for your answer.

....

....

(1)

(Total for question is 4 marks)

Q9.

A ticket for a seat at a school play costs £2.95

There are 21 rows of seats.
 There are 39 seats in each row.

The school will sell all the tickets.

Work out an estimate for the total money the school will get.

£ . . . .

(Total for Question is 3 marks)

Q10.

A cycle race across America is 3069.25 miles in length

Juan knows his average speed for his previous races is 15.12 miles per hour.
For the next race across America he will cycle for 8 hours per day.

(a) Estimate how many days Juan will take to complete the race.

....

(3)

Juan trains for the race.
The average speed he can cycle at increases.
It is now 16.27 miles per hour.

(b) How does this affect your answer to part (a)?

....

....

(1)

(Total for question = 4 marks)

Q11.

Mel drives a bus 39 weeks in a year.

She drives the bus an average of 298 miles each week.

(a) Work out an estimate for the total number of miles Mel drives the bus in one year.

.... miles

(2)

(b) Is your answer to part (a) an underestimate or an overestimate?
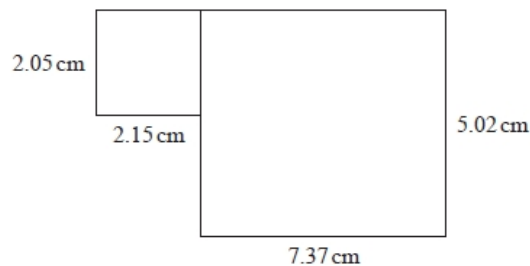You must give a reason for your answer.

....

....

(1)

(Total for question = 3 marks)

Q12.

This shape is made from two rectangles.

2.05 cm

2.15 cm

5.02 cm

7.37 cm

(a) Work out an estimate for the total area of the shape.

.... cm^2

(3)

(b) Is your answer to (a) an overestimate or an underestimate?

Give a reason for your answer.

....

....
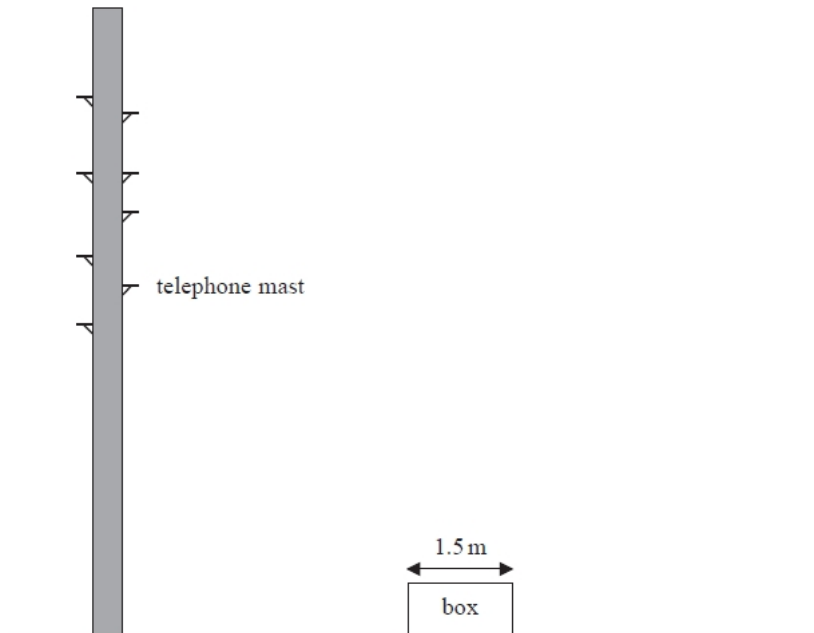
(1)

(Total for question = 4 marks)

Q13.

The accurate scale diagram shows a telephone mast and a box.

The box has a real width of 1.5 metres.

Find an estimate for the real height, in metres, of the telephone mast.

.... metres

(Total for question = 2 marks)