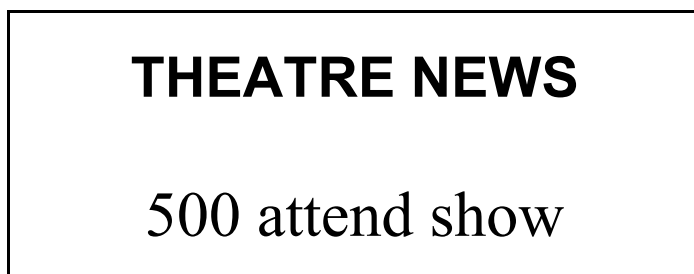


Non-Calculator

Q1.

The manager of a theatre records the attendance figure for a show to 2 significant figures.

A newspaper rounds the manager's figure to 1 significant figure.



What is the lowest and highest possible actual attendance?

Lowest _____

Highest _____

(Total 3 marks)

Calculator

Q2.

A shelf supports 80 kg, to the nearest kilogram.

Bottles weigh 1.4 kg each, to the nearest tenth of a kilogram.

Work out the greatest number of bottles that can definitely be supported by the shelf.

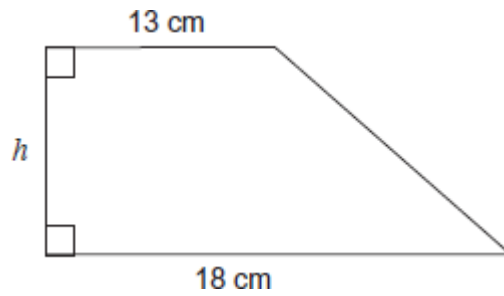
Answer _____

(Total 4 marks)

Q3.

The area of this trapezium is 280 cm^2 to the nearest 10 cm^2

Not drawn accurately



The lengths 13 cm and 18 cm are given to the nearest centimetre.

Work out the maximum possible value of the height h .

Answer _____ cm
(Total 4 marks)

Q4.

A formula connecting speed (s), distance (d) and time (t) is

$$s = \frac{d}{t}$$

$d = 160$ to 2 significant figures

$t = 7.2$ to 2 significant figures

Work out the upper and lower bounds for s .

Give your answers to 3 significant figures.

Upper bound _____

Lower bound _____

(Total 4 marks)

Q5.

Luke has a rectangular garden.
The length is 40 m
The width is 25 m
Both measurements are given to the nearest metre.

Mira also has a garden.
The area is 970 m² to the nearest 10 m²

Mira thinks her garden has a bigger area.

Is she correct?

Tick a box.
You **must** show your working.

Correct Incorrect Cannot tell

(Total 3 marks)

Q6.

Bags of nails weigh 200 grams each.
Boxes of screws weigh 140 grams each.
Both measurements are given to the nearest 10 grams.

Show that 4 bags of nails **could** weigh the same as 6 boxes of screws.

(Total 3 marks)

Q7.

A home gym can take a maximum load of 145 kg of weight plates.
Each weight plate is 10 kg to the nearest kilogram.

Work out the **greatest** number of weight plates that can be safely loaded on the gym.
You **must** show your working.

Answer _____

(Total 4 marks)

Q8.

Amy and Kate each catch three fish.
The weight of each fish, to the nearest tenth of a kilogram, is shown.

Amy	6.8 kg	4.3 kg	5.2 kg
Kate	8.2 kg	3.4 kg	4.5 kg

Kate says that the total weight of her fish is more than the total weight of Amy's fish.

Show that this could be true.

(Total 4 marks)