

Bounds

Difficulty: Easy

Question Paper 2

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Number
Sub-Topic	Bounds
Paper	Paper 2
Difficulty	Easy
Booklet	Question Paper 2

Time allowed: 40 minutes

Score: /31

Percentage: /100

Grade Boundaries:

CIE IGCSE Maths (0580)

A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

Question 1

The population of a city is 128 000, correct to the nearest thousand.

[1]

(a) Write 128 000 in standard form.

(b) Write down the upper bound of the population.

[1]

Question 2

Helen measures a rectangular sheet of paper as 197 mm by 210 mm, each correct to the nearest millimetre.

[2]

Calculate the upper bound for the perimeter of the sheet of paper.

Question 3

The length of a side of a regular hexagon is 6.8 cm, correct to one decimal place.

Find the smallest possible perimeter of the hexagon.

[2]

Question 4

A fence is made from 32 identical pieces of wood, each of length 2 metres correct to the nearest centimetre.

Calculate the lower bound for the total length of the wood used to make this fence.

[3]

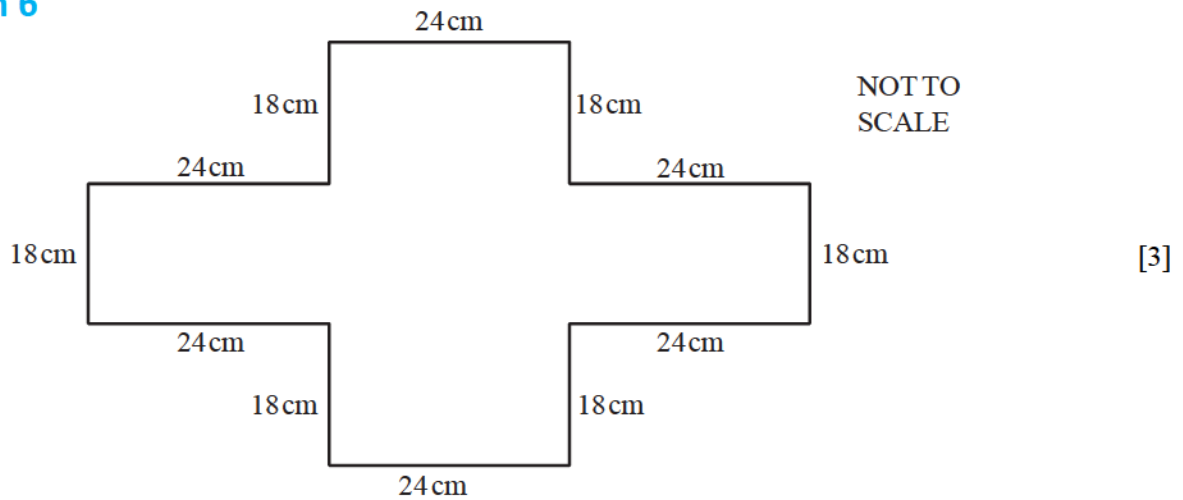
Write down your full calculator display.

Question 5

The length of each side of an equilateral triangle is 74 mm, correct to the nearest millimetre. [2]

Calculate the smallest possible perimeter of the triangle.

Question 6



Each of the lengths 24 cm and 18 cm is measured correct to the nearest centimetre. Calculate the upper bound for the perimeter of the shape.

Question 7

In 2005 there were 9 million bicycles in Beijing, correct to the nearest million.
The average distance travelled by each bicycle in one day was 6.5 km correct to one decimal place.
Work out the upper bound for the **total** distance travelled by all the bicycles in one day.

[2]

Question 8

Angharad sleeps for 8 hours each night, correct to the nearest 10 minutes.
The total time she sleeps in the month of November (30 nights) is T hours.
Between what limits does T lie?

[2]

Question 9

To raise money for charity, Jalaj walks 22 km, correct to the nearest kilometre, every day for 5 days.

(a) Complete the statement in the answer space for the distance, d km, he walks in one day. [2]

(b) He raises \$1.60 for every kilometre that he walks. [1]
Calculate the least amount of money that he raises at the end of the 5 days.

Question 10

A square has sides of length d metres. [1]
This length is 120 metres, correct to the nearest 10 metres.

(a) Complete the statement in the answer space.

(b) Calculate the difference between the largest and the smallest possible areas of the square. [2]

Question 11

The population, P , of a small island was 6380, correct to the nearest 10. [2]
Complete the statement about the limits of P .

Question 12

(a) 32 493 people were at a football match. [1]
Write this number to the nearest thousand.

(b) At another match there were 25 500 people, to the nearest hundred. [2]
Complete the inequality about n , the number of people at this match.

Question 13

A rectangular field is 18 metres long and 12 metres wide. Both measurements are correct to the nearest metre. Work out exactly the smallest possible area of the field.

[2]