



EXAM PAPERS PRACTICE

Bounds

Question Paper

Question 1

The cost of making a chair is \$28 correct to the nearest dollar.

Calculate the lower and upper bounds for the cost of making 450 chairs.

[2]

Question 2

The sides of an equilateral triangle are 9.4 cm, correct to the nearest millimetre.

Work out the upper bound of the perimeter of this triangle.

[2]

Question 3

A metal pole is 500cm long, correct to the nearest centimetre.
The pole is cut into rods each of length 5.8 cm, correct to the nearest millimetre.

[3]

Calculate the largest number of rods that the pole can be cut into.

Question 4

A rectangle has length 5.8 cm and width 2.4 cm, both correct to 1 decimal place.

[3]

Calculate the lower bound and the upper bound of the perimeter of this rectangle.

Question 5

One year ago Ahmed's height was 114 cm.
Today his height is 120 cm.
Both measurements are correct to the nearest centimetre.

[2]

Work out the upper bound for the increase in Ahmed's height.

Question 6

The length, l metres, of a football pitch is 96m, correct to the nearest metre.

Complete the statement about the length of this football pitch.

[2]

Question 7

The length, p cm, of a car is 440 cm, correct to the nearest 10 cm.

Complete the statement about p .

[2]

Question 8

An equilateral triangle has sides of length 16.1 cm, correct to the nearest millimetre.

Find the lower and upper bounds of the perimeter of the triangle.

[2]

Question 9

A large water bottle holds 25 litres of water correct to the nearest litre.

A drinking glass holds 0.3 litres correct to the nearest 0.1 litre.

Calculate the lower bound for the number of glasses of water which can be filled from the bottle.

[3]

Question 10

A carton contains 250 ml of juice, correct to the nearest millilitre.

Complete the statement about the amount of juice, j ml, in the carton.

[2]

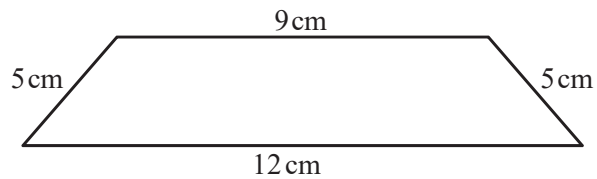
Question 11

The sides of a rectangle are 6.3 cm and 4.8cm, each correct to 1 decimal place.

[2]

Calculate the upper bound for the area of the rectangle.

Question 12



NOT TO
SCALE

The diagram shows a quadrilateral.
The lengths of the sides are given to the nearest centimetre.

[2]

Calculate the upper bound of the perimeter of the quadrilateral.

Question 13

The length of a car is 4.2 m, correct to 1 decimal place.

[2]

Write down the upper bound and the lower bound of the length of this car.



EXAM PAPERS PRACTICE

Question 14

Joe measures the side of a square correct to 1 decimal place.
He calculates the upper bound for the area of the square as 37.8223 cm².

[2]

Work out Joe's measurement for the side of the square.

Question 15

The number of spectators at the 2010 World Cup match between Argentina and Mexico was 82 000 correct to the nearest thousand.
If each spectator paid 2600 Rand (fi) to attend the game, what is the lower bound for the total amount paid?
Write your answer in standard form.

[3]

Question 16

A rectangular photograph measures 23.3 cm by 19.7cm, each correct to 1 decimal place.
Calculate the lower bound for

(a) the perimeter,

[2]

(b) the area.

[1]

Question 17

Asliiaf takes 1500 steps to walk d metres from his home to the station.
Each step is 90 centimetres correct to the nearest 10 cm.

Find the lower bound and the upper bound for d .

[3]

Question 18

When a car wheel trims once, the car' travels 120 cm, correct to the nearest centimetre.

[2]

Calculate the lower and upper bounds for' the distance travelled by the car when the wheel trims 20 times.

Question 19

The side of a square is 6.3 cm, correct to the nearest millimetre.

The lower bound of the perimeter of the square is u cm and the upper' bound of the perimeter is v cm.

Calculate the value of

[1]

(b) $v - u$.

[1]

Question 20

A rectangle has sides of length 6.1 cm and 8.1 cm correct to 1 decimal place.

Calculate the upper bound for the area of the rectangle as accurately as possible. [2]

Question 21

A rectangle has sides of length 6.1 cm and 8.1 cm correct to 1 decimal place.

Complete the statement about the perimeter' of the rectangle. [3]

Question 22

Carmen spends 5 minutes, correct to the nearest minute, preparing one meal.
She spends a total time of T minutes preparing 30 meals.
Between what limits does T lie?

[2]

Question 23

The distance between Singapore and Sydney is 6300 km correct to the nearest 100 km.
A businessman travelled from Singapore to Sydney and then back to Singapore.
He did this six times in a year.
Between what limits is the total distance he travelled?

[2]

Question 24

The length of a road is 380 m, correct to the nearest 10m .
Maria runs **along** this road **at** an average speed of 3.9 m/s.
This speed is correct to 1 decimal place.
Calculate the greatest possible time taken **by** Maria.

[3]