

Numbers & Accuracy

Difficulty: Hard

Question Paper 1

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Number
Sub-Topic	Numbers & Accuracy
Paper	Paper 2
Difficulty	Hard
Booklet	Question Paper 1

Time allowed: 35 minutes

Score: /27

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

Find the lowest common multiple (LCM) of 20 and 24.

[2]

Question 2

Without using your calculator and by rounding each number correct to 1 significant figure, estimate the value of

$$\frac{10.3 \times 19.5}{88.9 - 43.2}$$

You must show all your working.

[2]

Question 3

Write these in order of size, smallest first.

0.6^3

0.22

$\sqrt{0.09}$

0.4^2

[2]

Question 4

The probability that it will rain on any day is $\frac{1}{5}$.

Calculate an estimate of the number of days it will rain in a month with 30 days.

[1]

Question 5

A lake has an area of 63 800000 000 square metres.

Write this area in square kilometres, correct to 2 significant figures.

[2]

Question 6

210 2 212 213 214 215 216

From the list of numbers, find

(a) a prime number, [1]

(b) a cube number. [1]

Question 7

Which of the following numbers are irrational?

$\frac{2}{3}$ $\sqrt{36}$ $\sqrt{3} + \sqrt{6}$ π 0.75 48% $8^{\frac{1}{3}}$ [2]

Question 8

Write 0.00658

(a) in standard form,

[1]

(b) correct to 2 significant figures.

[1]

Question 9

$$p = \frac{0.002751 \times 3400}{(9.8923 + 24.7777)^2}.$$

(a) In the spaces provided, write each number in this calculation correct to 1 significant figure.

[1]

$$\frac{\text{.....} \times \text{.....}}{(\text{.....} + \text{.....})^2}$$

(b) Use your answer to **part (a)** to **estimate** the value of p .

[1]

Question 10



The picture shows the Sky Tower in Auckland.
Alongside the tower is a boat. The boat is 33 metres long.
Use the length of the boat to estimate the height of the Sky Tower.

[2]

Question 11

The area of a small country is 78 133 square kilometres.

(a) Write this area correct to 1 significant figure.

[1]

(b) Write your answer to **part (a)** in standard form.

[1]

Question 12

The altitude of Death Valley is 086 metres. The altitude of Mount Whitney is 4418 metres.

[1]

Calculate the difference between these two altitudes.

Question 13

$$\mathcal{E} = \{-2\frac{1}{2}, -1, \sqrt{2}, 3.5, \sqrt{30}, \sqrt{36}\}$$

$$X = \{\text{integers}\}$$

$$Y = \{\text{irrational numbers}\}$$

List the members of

[1]

(a) X ,

(b) Y .

[1]

Question 14

Complete this table of squares and cubes.
The numbers are not in sequence.

[3]

Number	Square	Cube
3	9	27
.....	121
.....	2744
.....	0343