## Conversion

## Question Paper

## Question 1

Write the recurring decimal 0.25 as a fraction.
[ 0.25 means 0.2555 ...]

## Question 2

At the beginning of July, Kim had a mass of 63 kg .
At the end of July, his mass was 61 kg .
Calculate the percentage loss in Kim's mass.

## Question 3

Work out 72 cents as a percentage of 83 cents.

## Question 4

Write
(a) 60 square metres in square centimetres,
(b) 22 metres per second in kilometres per hour.

## Question 5

A cruise ship travels at 22 knots.
[1 knot is 1.852 kilometres per hour.]
Convert this speed into metres per second.

## Question 6

The maximum speed of a car is $252 \mathrm{~km} / \mathrm{h}$.
Change this speed into metres per second.

## Question 7

Lin scored 18 marks in a test and Jon scored 12 marks.
Calculate Lin's mark as a percentage of Jon's mark.

## Question 8

Calculate

$$
\frac{5^{2}}{2^{5}}
$$

(a) giving your answer as a fraction,
(b) giving your answer as adecimal.

## Question 9

Write the recurring decimal $0.6 \overline{3}$ as a fraction in its lowest terms.
You must show all your working.

## Question 10

Write the recurring decimal $0.1 \dot{7}$ as a fraction.
Show all your working.

## Question 11

(a) Write $\$ 0.70$ as a fraction of $\$ 5.60$, giving your answer in its lowest terms.
(b) Write the recurring decimal $0.1 \dot{8}$ as a fraction in its lowest terms. [ 0.18 means $0.181818 \ldots$ ]

## Question 12

$$
\frac{3}{5}<p<\frac{2}{3}
$$

Which of the following could be a value of $p$ ?
$\frac{16}{27} \quad 0.67 \quad 60 \% \quad(0.8)^{2} \quad \sqrt{\frac{4}{9}}$

## Question 13

A tin of soup has the following information on the label.

| 200 grams of soup contains |  |  |
| :---: | :---: | :---: |
| Protein | Carbohydrate | Fat |
| 4 g | 8.7 g | 5.8 g |

(a) What fraction of the soup is Protein? Give your answer in its simplest form.
(b) What percentage of the soup is Carbohydrate?

## Question 14

Sima drinks 2.5 litres of water each day.
A full glass holds 125 millilitres of water.
How many full glasses of water does Sima drink each day?

## Question 15

The population of Europe is 580000000 people.
The land area of Europe is 5900000 squarekilometres.
(a) Write 580000000 in standard form.
(b) Calculate the number of people per square kilometre, to the nearest whole number.
(c) Calculate the number of square metres per person.

## Question 16

The top speed of a car is 54 metres per second.
Change this speed into kilometres per hour.

