

# MATHEMATICS

## Level One

### Units

1. .

- a. 5.67mm,  $5.67 \times 10^{-3} \text{m}$
- b. 4.83mm,  $4.83 \times 10^{-3} \text{m}$
- c. 34mm,  $3.40 \times 10^{-2} \text{m}$
- d. 867mm,  $8.67 \times 10^{-1} \text{m}$
- e. 2356mm,  $2.356 \times 10^0 \text{m}$
- f. 1.56mm,  $1.56 \times 10^{-3} \text{m}$
- g. 0.00456mm,  $4.56 \times 10^{-6} \text{m}$
- h. 123163mm,  $1.23163 \times 10^2 \text{m}$

2. Completed table:

Measurements	Given data	Unit Specified	Standard form
Equatorial Circumference	40075.01km	40,075,010	$4.007501 \times 10^7$
Mean angular velocity of the earth	$0.07921 \text{mms}^{-1}$	0.00007921	$7.792115 \times 10^{-5}$
Mean radius of the earth	6,374km	6,374,000	$6.374 \times 10^6$
Broadcast Frequency of GPS satellite	1227.6MHz	1,227,600	$1.2276 \times 10^9$

3. Answers to all parts of the question are in the table below

	1000m	5000m	10000m
A	8mm	20mm	35mm
B	3mm	11mm	21mm
C	8mm	24mm	44mm
D	4mm	12mm	22mm