## TAURANGA GIRLS COLLEGE YEAR 10 HOMEWORK SHEET

## Series D Sheet 4

TGC Values: Respect, Participation, Pride

## KEY SKILLS:

1. Write the number one million one hundred thousand
2. Round 753,600 to the nearest ten thousand
3. Write three and two hundredths as a decimal
4. Write $43 / 5$ as an improper fraction.
5. Simplify the fraction $\frac{40}{75}$
6. Write the fractions $\frac{2}{7} \quad \frac{2}{5} \quad \frac{2}{9}$ in order from largest to smallest.
7. Write the point R as a fraction

8. Write the point P as a decimal

9. Calculate $65 \%$ of $\$ 470$
10. Calculate $\$ 290+$ GST

Key Skills Total:
e) Which class, on average, took longer to get to school?

## REVIEW and CURRENT WORK (CL 4 - 5): Measurement

A. Number and Algebra Review

1. $\sqrt{560}=$
(1dp)
2. $\left(8--^{-} 2\right)^{2}=$

Simplify:

1. $6 n-4 m+5 n=$
2. $\frac{10 n}{20 n}=$
3. Expand $3 n(2 n-5)=$
4. Factorise $8 n+24$
$=8($ $+$ $\qquad$
B. Metric conversions

Complete these metric conversions:

1. $8 \mathrm{~m}=$ $\qquad$ cm
2. $5000 \mathrm{~g}=$ $\qquad$ kg
3. $6700 \mathrm{~m}=$ $\qquad$ km
4. 8.5 tonnes $=$ $\qquad$ kg
C. Perimeter: Calculate the perimeter of these shapes:
5. a)

D. Area: Find the area of these
shapes. Write the unit for each area.
6. A rectangle with sides of length 15 m and 8 m .
7. 


3. $A=\pi \times R^{2}$ =
=
4. $A=\pi \times R^{2}$

$$
=
$$


(1dp)

$$
\begin{equation*}
= \tag{1dp}
\end{equation*}
$$


E. Volume: Find the volume of these shapes. Write the units for each answer.

1. A cube with sides of length 5 m .

2. 

b) $C=\pi \times D$


## Current Work CL4-5:

$\qquad$ $/ 20$


## REVIEW and CURRENT WORK (CL 5-6): Measurement

A. Number and Algebra Review 2.

1. $3 \frac{1}{4}+5 \frac{2}{9}=$
2. Divide $\$ 32$ in the ratio $2: 3$
D. Area: Find the area of these shapes. Write the unit for each.
3. $6 n-15 q-3 n-q=$
4. 


$(x-7)(x+8)$
$=$
=
Factorise: $8 \mathrm{n}^{2}+16 \mathrm{~nm}$
2.
=

## B. Metric conversions

Complete these metric conversions

1. $740 \mathrm{~m}=$ $\qquad$ km
2. $\quad 3.6 \mathrm{~kW}=$ $\qquad$ W
3. $1 \mathrm{~m}^{2}=$ $\qquad$ $\mathrm{cm}^{2}$ (note: the answer is not 100)

C. More Perimeter: Find the perimeter of these shapes:
4. 



1. $C=\pi \times D$
$=$

$\qquad$ /14

## APPLICATIONS and TASKS

For each of these tasks you must show your working. Set out your solution in a clear and ordered manner. Read the question carefully.

Task One (2 marks)
A goat is tethered on a 3 m rope that can
move along a 10 m wire as illustrated below:


What area of grass can the goat reach?
Task Two (2 marks) A circular pool has a radius of 3.6 m . There is a 1.2 m path around the pool and then a fence.
What is the area of the path?

Task Three (2 marks)


A circle has a radius 10 m .
Is the area of this circle bigger, smaller or the same as the combined area of two circles with half this radius?

Applications Total: $\qquad$ /6

Overall Results:

| KS | CL4-5 | CL5-6 | APP | Parent Signature: |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 13 | 30 | 22 | 6 |  |

