TAURANGA GIRLS COLLEGE YEAR 10 HOMEWORK SHEET Series D Sheet 4

TGC Values: Respect, Participation, Pride

KEY SKILLS:

- 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 $\frac{2}{7}$ $\frac{2}{5}$ $\frac{2}{9}$ 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



The box plot above records how long students in 10A and 11A took to get to school. The times were recorded to the nearest five minutes.

- a) What was the *median* time for 11A?
- **b)** What was the *upper quartile* time for 10A?
- c) What percentage of students in 11A took less than 15 minutes to get to school?
- d) If there were 28 students in 11A how many took between 15 and 25 minutes to get to school?
- e) Which class, *on average*, took longer to get to school?

Key Skills Total: _____ / 15

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Sheet 10D4

REVIEW and CURRENT WORK (CL 4 – 5): Measurement

Α.	Number and Algebra Review
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1. $\sqrt{560}$ = (1dp)

2.
$$(8 - 2)^2 =$$

Simplify:

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

Metric conversions Β.

Complete these metric conversions:

- 1. 8m = cm
- 5000g = kg 2.
- 3. 6700m = km
- 8.5 tonnes = kg 4.
- **C. Perimeter:** Calculate the perimeter of these shapes:



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



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

Sheet 10D4

1. A cube with sides of length 5m.



2.



REVIEW and CURRENT WORK (CL 5 – 6): Measurement

2.

2.

- **Number and Algebra Review** Α.
- **1.** $3\frac{1}{4} + 5\frac{2}{9} =$
- Divide \$32 in the ratio 2:3 2.

Simplify:

6n - 15q - 3n - q =1.

2.
$$\frac{30a^{12}}{40a^6} =$$

3. Expand and simplify (x - 7)(x + 8)=

=

Factorise: $8n^2 + 16nm$

Metric conversions Β.

Complete these metric conversions

- 740 m = km 1.
- **2.** 3.6 kW = W
- **3.** $1m^2 = \dots cm^2$ 3. 100cm (note: the answer is not 100) 100cm 1m1m
- С. More Perimeter: Find the perimeter of these shapes:

1. $C = \pi x D$ =

=





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8m



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.**

3.6m

Pool

Task One (2 marks)

A goat is tethered on a 3m rope that can move along a 10m wire as illustrated below:



What area of grass can the goat reach?

Fence

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



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

Applications Total: _____ / 6

Overall Results:

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

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