TAURANGA GIRLS COLLEGE
YEAR 10 HOMEWORK SHEET
Series D Sheet 3
TGC Values: Respect, Participation, Pride

Name: _____

Due Date: _____

KEY SKILLS:

1. Write the number two million two hundred and six thousand

_____

2. Round 943,500 to the nearest *ten thousand*

_____

3. Write *seven and two tenths* as a *decimal*

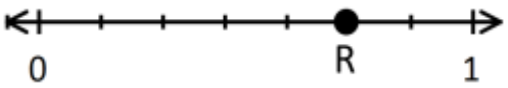
_____

4. Write 7¾ as an improper fraction.

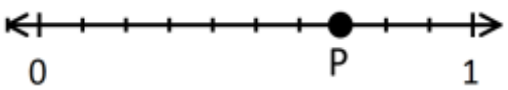
5. Simplify the fraction $\frac{30}{65}$

6. Write the fractions $\frac{3}{8}$ $\frac{3}{7}$ $\frac{3}{10}$ in order from largest to smallest.

7. Write the point R as a *fraction*



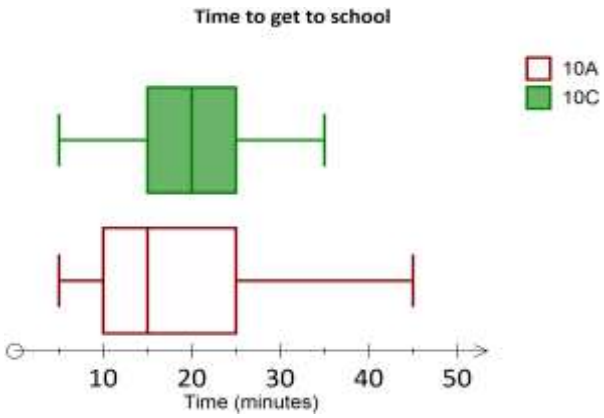
8. Write the point P as a *decimal*



9. Calculate 85% of $560

10. Calculate $630 + GST

11.



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

a) What was the *median* time for 10A?

b) What was the *upper quartile* time for 10C?

c) If there were 28 students in 10A how many took more than 25 minutes to get to school?

d) Which class, *on average*, took longer to get to school?

e) Which class had the biggest *overall spread* of times?

Key Skills Total: _____ / 15

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

A. Number and Algebra Review

1. $\sqrt{56}$ = (1dp)

2. $\frac{2}{5} + \frac{1}{3}$ =

Simplify:

1. 6n + 5m – 3n – m =

2. $\frac{60n}{20n}$ =

3. Expand 5n(2n – 7) =

4. Factorise 18n + 27

= 9(……. + ...)

B. Metric conversions

Complete these metric conversions:

1. 8m = …….. mm

2. 3000m = ……. km

3. 2.1cm = …… mm

4. 6300 g = …….. kg

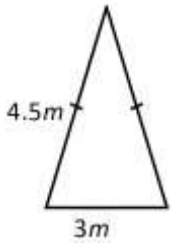
5. 8.5L = …….. mL

C. Perimeter

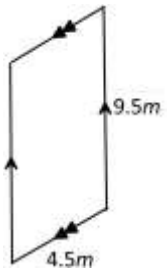
Calculate the perimeter of these shapes:

1. A rectangle with width 4.5m and length 7.5m

2. a)

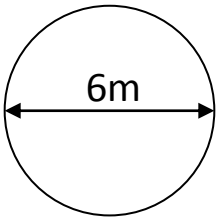


b)

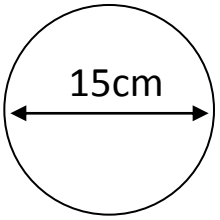


D. More Perimeter

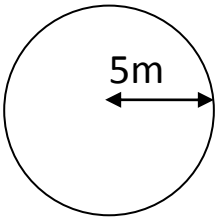
Use the rule C = π x D to calculate the circumference of these circles.
Round answers to 1dp.



1. C = π x D
=
=



2. C = π x D
=
=



3. C = π x D
=
=

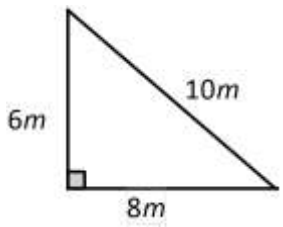
E. Area

Find the area of these shapes. Write the units for each answer.

1. A square of side length 8cm.

2. A rectangle with sides of length 5m and 7m.

3.



Current Work CL4-5: ___ / 20

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

A. Number and Algebra Review

1. Round 45^3 to 2sf

2. An item is increased in price from \$1.85 to \$2.05 in a sale. What percentage increase is this?

Simplify:

1. $65n - 5q - 36n - 8q =$

2. $2n^7 \times -5n^5 =$

3. Expand and simplify $(x - 2)(x - 8)$

=

=

Factorise: $18n^2 + 10nm =$

B. Metric conversions

Complete these metric conversions

1. 860 g = ... kg

2. 27.8 L = ... mL

3. 600kg = ... tonnes

4. 9360 W = ... kW

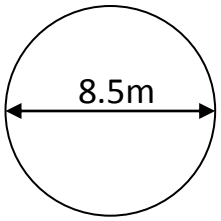
C. More Perimeter

Use the rule C = π x D to calculate the circumference of these circles. Round your answer to 1dp.

1. C = π x D

=

=



2. C = π x D

=

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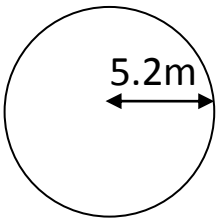
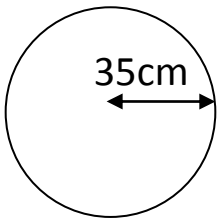


3. C = π x D

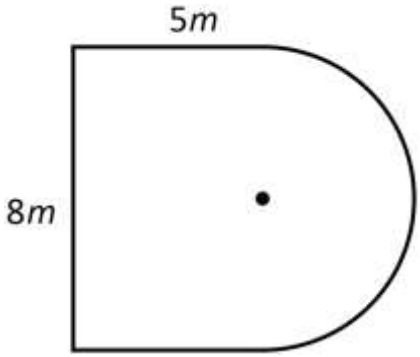
=

=

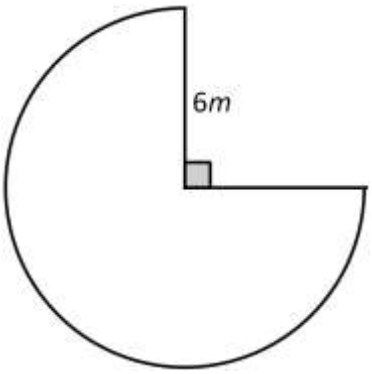


Calculate the perimeter of these shapes

4.



5.



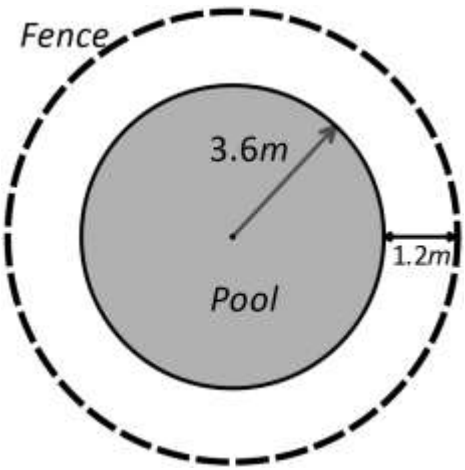
Current Work CL5-6: ___ ***/15***

APPLICATIONS and TASKS

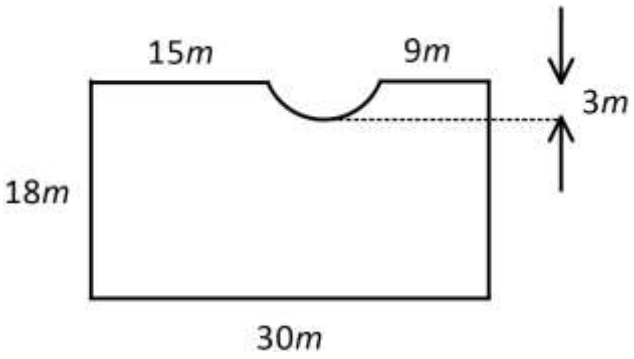
*For each of these tasks you **must show your working.*** Set out your solution in a clear and ordered manner. **Read the question carefully.**

Task One (2 marks)
John has just had a 0.8 tonne load of mulch for his garden delivered on a truck. His wheelbarrow will hold around 25kg of mulch and it takes him about 10 minutes to fill each wheelbarrow and put it on the garden.
How long will it take John to put all the mulch on his garden?

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. If the fence costs $28 a metre to build, how much will it cost?



Task Three (2 marks)
Calculate the perimeter of this shape:



Applications Total: _____ / 6

Overall Results:

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