

# TAURANGA GIRLS COLLEGE

## YEAR 10 HOMEWORK SHEET

### Series A Sheet 3

TGC Values: Respect, Participation, Pride

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_



#### KEY SKILLS:

1. In the number 345.189 what digit is in the *hundredths* column? \_\_\_\_\_

2. Round 0.486 to the nearest *hundredth*  
\_\_\_\_\_

3. Write *seven hundredths* as a decimal  
\_\_\_\_\_

4. 5.2 m = \_\_\_\_\_ cm

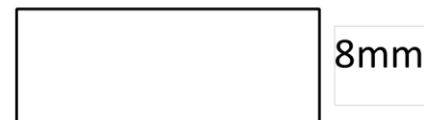
5. How many *centimetres* are there in *one metre*? \_\_\_\_\_

6. If  $p = 3$  and  $q = 4$  give the value of  $p + q^2$  \_\_\_\_\_

7. If  $4p = 32$ , what is the value of  $p$ ? \_\_\_\_\_

8. What is the *perimeter* of this rectangle?

21mm



8mm

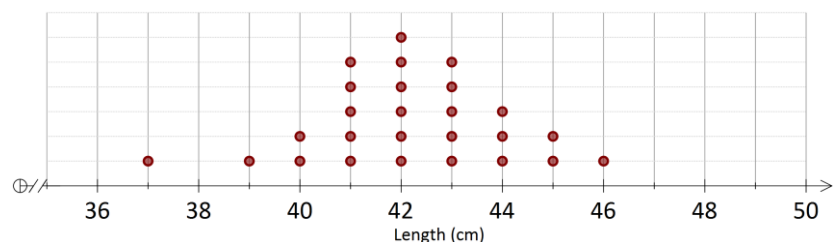
\_\_\_\_\_ cm

9. What is the *area* of the rectangle shown above?

\_\_\_\_\_  $\text{cm}^2$

Popliteal Length Year 10 class

10. The students in a year 10 class measured the popliteal length of their right leg. The results are shown here:



a) What type of graph is this? \_\_\_\_\_

b) What was the *range* of popliteal lengths? \_\_\_\_\_

c) What was the *median* popliteal length? \_\_\_\_\_

d) Was the shape of the popliteal lengths symmetrical or skew? \_\_\_\_\_

Key Skills Total: \_\_\_\_\_ / 13

## CURRENT WORK (CL 4 – 5): Number

### A Review ...

#### Calculate

- $^{-}5 - 56 =$
- $2 \times (7 - 3)^2 =$
- $5^3 =$
- $\sqrt{625}$
- $\frac{3}{4} - \frac{1}{3} =$

### Rounding

Round each number as required:

- 15,654 to nearest thousand
- 1.72 to nearest tenth
- 5.822 (1dp) =
- $\sqrt{6.5} =$  (2dp)

### B Fraction check

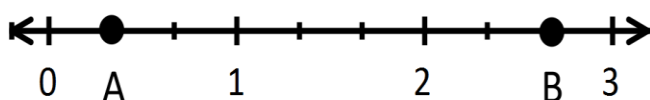
1. Write these fractions :

- seven fifths
- five and three eighths

2. Write these fractions in order from biggest to smallest.

$$\frac{4}{9} \quad \frac{4}{5} \quad \frac{4}{7}$$

3. Write the points marked on the number line as a *fraction*

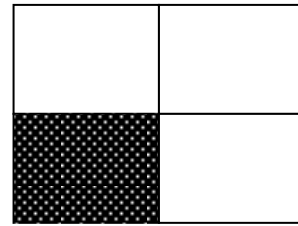


A =

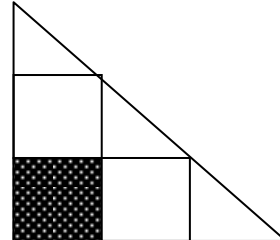
B =

4. What fraction is shaded?

a)



b)



5. Complete this equivalent fraction:

$$\frac{2}{5} = \frac{\quad}{35}$$

6. Simplify  $\frac{15}{35} =$

7. Complete this table:

Mixed Number	Improper Fraction
Eg $5\frac{3}{4}$	$\frac{23}{4}$
$6\frac{2}{3}$	
	$\frac{24}{5}$

8.  $\frac{1}{5}$  of 30 =

9.  $\frac{1}{8}$  of 40 =

10.  $\frac{3}{5}$  of 25 =

11.  $\frac{2}{3}$  of 18 =

Current Work CL4-5: \_\_\_\_ / 24

## CURRENT WORK (CL 5 – 6 ): Number

### A Review ...

#### Calculate

1.  $\sqrt[3]{500}$  (1sf)

2.  $2.3^4$  (2sf)

3.  $\frac{6.1 - 2.3}{3.1 - 0.4}$  (2sf)

4.  $2\frac{1}{5} \times 2\frac{3}{4} =$

#### Estimating

Without a calculator estimate these calculations:

5.  $239 \times 52 \approx \dots \times \dots$   
=

6.  $0.89 \times 32 \approx \dots \times \dots$   
=

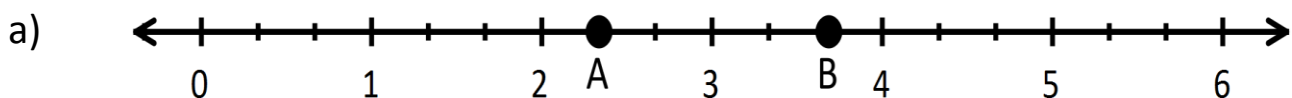
### B Fraction work

1. Compare the size of these fractions using < or > symbols

a)  $\frac{4}{9}$   $\frac{4}{5}$

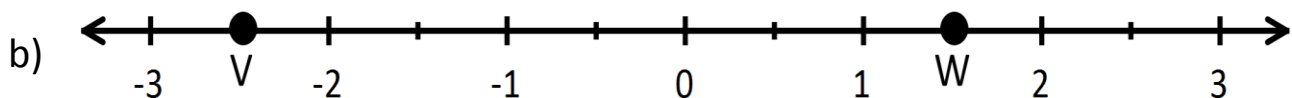
b)  $\frac{2}{3}$   $\frac{3}{4}$

2. Write each fraction for the points marked on the number line as a *mixed number* **and** an *improper fraction*



A = ..... and .....

B = ..... and .....



V = ..... and .....

W = ..... and .....

3. Without a calculator find:

a)  $\frac{1}{5}$  of 60 =

b)  $\frac{3}{8}$  of 40 =

4.  $\frac{1}{5}$  of a number is 6. What is the number?

5.  $\frac{3}{4}$  of a number is 12, What is the number?

6. If David saves \$60 a week, which is  $\frac{2}{3}$  of his weekly pay, how much does he make in a week?

7. Palmers Garden Centre sold 85 plants yesterday. If they sold  $\frac{3}{5}$  of them in the morning how many did they sell in the afternoon.

Current Work CL5-6: \_\_\_\_ / 18

## APPLICATIONS and TASK

For each of these tasks you **must show your working**. Set out your solution in a clear and ordered manner. Your final step should be to write a sentence which gives your answer to the question. (Two marks for the working and one mark for the correct answer)

### Situation

Tara has a small business making and selling jars of organic handcream and moisturiser. She sells the jars of handcream for \$15 each, and moisturiser for \$23 each.

### Task One

At the beginning of the week she made 25 jars of handcream and 30 jars of moisturiser.

During the week she sold all of the jars of

handcream and  $\frac{4}{5}$  of the jars of moisturiser.

*Calculate how many jars of handcream and moisturiser she sold.*

*What was the total value of her sales for this week?*

### Task Two

At the beginning of another week she made a total of 50 jars of handcream and moisturiser altogether. If she made 15 jars of handcream and sold  $\frac{2}{3}$  of them, and had  $\frac{1}{4}$  of the jars moisturiser left to sell.

*Calculate the total value of her sales for this week.*

*Applications Total: \_\_\_\_\_ / 6*

### Overall Results:

KS	CL4-5	CL5-6	APP	Parent Signature:
13	24	18	6	