

TAURANGA GIRLS COLLEGE
YEAR 9 HOMEWORK SHEET
Series A Sheet 5

TGC Values: Respect, Participation, Pride

Name: _____

Tutor Class: _____

Due Date: _____

KEY SKILLS:

1. In the number 851,362 what digit is in the *ten thousands* column? _____

2. Write 874,000 in words

3. Round 54,894 to the nearest *thousand*

4. Insert < or > to make it a true statement:

67,742 _____ 67,741

5. 11 squared = _____

6. List the first three multiples of 7

7. Calculate $7 + 2 \times 3$

8. Write 0.07 as a fraction = _____

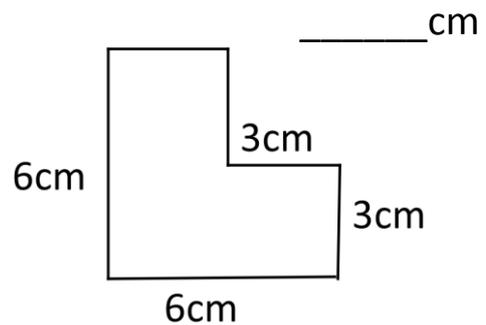
9. $\frac{2}{3}$ of 18 = _____

10. $\frac{2}{7} \times 3 =$ _____

11. Write the next two numbers:
-17, -12, -7, _____, _____

12. 5 metres = _____ mm

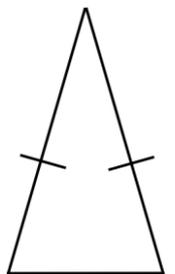
13. What is the *perimeter* of this shape?



14. What is the *area* of a square of side length 5cm?

_____ cm²

15. What is the full name of this shape? (two sides are equal length)



16. The time taken, in seconds, for seven year 7 students to run 100m was recorded:

14, 15, 15, 16, 17, 17, 17

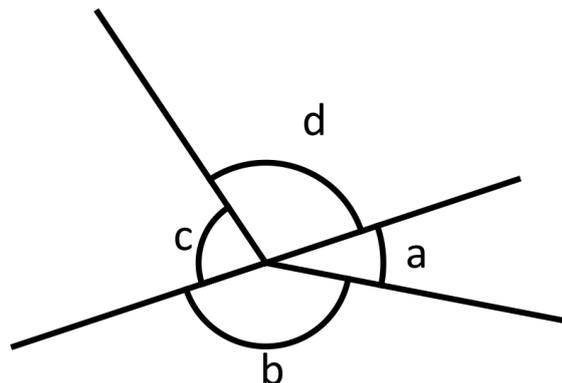
What was the *range* of times run by the seven students?

Key Skills Total: _____ / 16

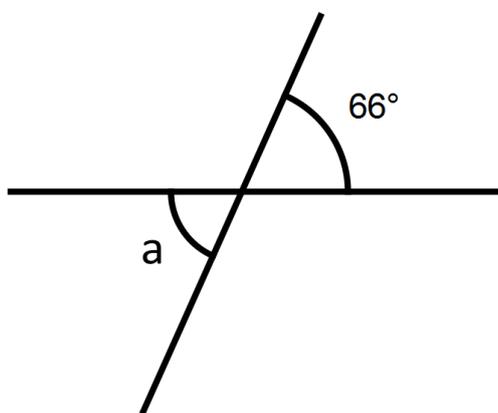
CURRENT WORK:

1. Are the following statements true or false for this diagram?

- Angle **a** is an *obtuse angle*
- Angles **a** and **c** are *vertically opposite*
- Angles **a** and **b** add to 180°
- Angles **c** and **d** are angles on a straight line
- Angle **b** is a reflex angle

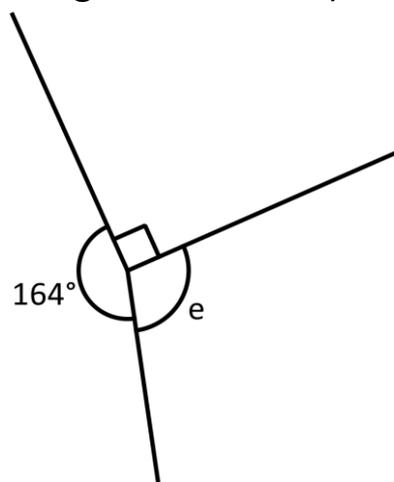


2. Give the size of each angle below (do **not** use a protractor) **and** state the reason for your answer. (One mark for each angle and reason)



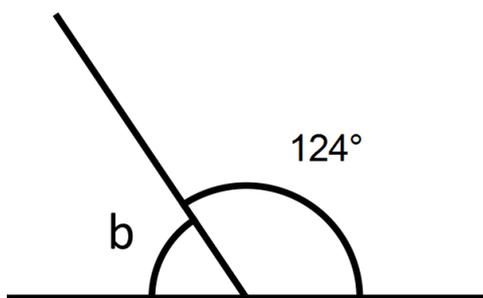
$a = \underline{\hspace{2cm}}$

Reason:



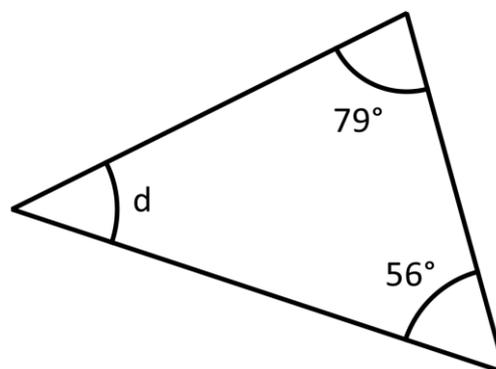
$e = \underline{\hspace{2cm}}$

Reason:



$b = \underline{\hspace{2cm}}$

Reason:



$d = \underline{\hspace{2cm}}$

Reason:

Current Work Total: / 13

APPLICATIONS AND PROBLEM SOLVING

(Show your working to show how you solved these questions. One mark for working, one mark for the correct answer).

We will use the method of *Guess, Check and Refine* for these questions.

With this method you:

- Make a guess (try and get one that is reasonable and sensible),
- Check if your guess gives the correct answer
- If not, then try another guess (use your answer to your first guess as a guide). You may need several further guesses.
- Once you have found the correct answer write a clear statement which answers the question

1. Three consecutive numbers (that is, three numbers one after the other, like 7, 8, and 9) add up to 66. What is the middle number of the three consecutive numbers?

Working:

Guess #1: Try 10, 11, 12

Check: $10 + 11 + 12 = \dots\dots$

So this is not the answer. Try something bigger.

Guess #2: Try 20, 21, 22

Check: $20 + 21 + 22 = \dots\dots$ So this *is / is not* the answer.

Guess #3: Try 21, \dots , \dots

Check: $21 + \dots\dots + \dots\dots = \dots\dots$ So this *is / is not* the answer.

Answer:

The middle number of the three consecutive numbers that add up to 66 is \dots

2. Four consecutive numbers (that is, four numbers one after the other, like 6, 7, 8, and 9) add up to 34. What is the smallest of the four consecutive numbers?

Working:

Guess #1: Try 10, 11, 12, 13

Check: $10 + 11 + 12 + 13 = \dots\dots$ So this is not the answer. Try something smaller.

Guess #2: Try 5, 6, $\dots\dots$, $\dots\dots$

Check: $5 + \dots + \dots + \dots = \dots\dots$ So this *is / is not* the answer.

Guess #3: Try 7,,,

Check: $7 + \dots + \dots + \dots = \dots$ So this *is / is not* the answer.

Answer:

The smallest number of four consecutive numbers that add up to 34 is

3. Take two consecutive numbers. The smaller number must be odd and the larger number must be even (like 7 and 8, or 15 and 16).

When you: double the odd number; halve the even number and add the two results together you get a total of 28.

What was the odd number you started with?

Working:

Guess #1: Try 7 and 8

Check: double 7 + half 8 = + = So this is not the answer. Try something smaller.

Guess #2: Try 9 and

Check: double 9 + half = + =

So this *is / is not* the answer.

Guess #3: Try and

Check: double + half = + =

So this *is / is not* the answer.

Answer:

The two numbers are and

Applications and problem solving Total: _____ / 6

Self Reflection:

		<i>Comment (What do I need to understand?)</i>
Key Skills	___ / 16	
Current work	___ / 13	
Applications	___ / 6	
Total	___ / 35	

Parent Signature: _____