

# GCSE Maths

## ASSIGNMENT Wk4

### Preparatory Sheet

Required preparation for the session on.....

Algebra 1) **WRITING EXPRESSIONS** and **B O D M A S**

Aims of this session: Review your abilities in each of these areas, Green (feel confident..G), Amber (need to work more on..A), Red (Feel weaker at this..R)

1. Count real life items and replace numeric value with letters of the alphabet
2. Write out a simple expression for a real life situation
3. Use brackets and correct notation for add subtract multiply and divide
4. Evaluate expressions using the correct order BODMAS (or BIDMAS)
5. Identify equivalent expressions in different forms

G	A	R
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MOSTLY GREEN

MOSTLY ORANGE

MOSTLY RED

START

Watch the video/s, read and practice (A01) using the online materials. Read your GCSE maths AQA book



A01 Expressions and algebraic terminology




Write a comment about what you learned from the videos / materials below



1.

**Count real life items and replace numeric value with letters of the alphabet**

Q... in Algebra we can use letters of the alphabet instead of some numbers. This is used to simplify how we write things down. Think of a way of writing down 'Seventeen People' as quick as possible using just a number and single letter of the alphabet.

*HINT... use the first letter of the word 'People' to represent the word just like in the road sign for Hospital  only a letter 'H' is used. The number 17 can be used instead of the word.*

2.

**Write out a simple expression for a real life situation**



Q... Can you write out below an order at a restaurant for two eggs, one sausage, beans and three pieces of toast?

*HINT... you could use the letter 'e' for eggs, 's' for sausages, 'b' for beans and 't' for toast. The number of each you want is written in front of the letter eg four hash browns would be 4h*

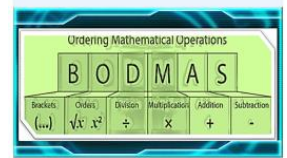
3.

**Use brackets and correct notation for add subtract multiply and divide**



Q... Do you know the short hand way to write 'add' and 'subtract'? Probably ... but what about multiply or divide? Below have a go writing the expression for ... 'Three full price tickets and one half price ticket'

Hint... add and subtract stay the same with + and - signs used in algebra. Multiply does not use the 'x' sign but uses brackets instead.. so two times eight would be 2 ( 8). Divide does not use the sign ' ÷ ' in algebra but instead uses fractions or a forward slash .. eg a third of 12 would be 12/3.



4. Refer to N06 for your next lesson content before continuing

**Evaluate expressions using the correct order BODMAS (or BIDMAS)**

Q... BODMAS stands for brackets, over, division, multiplication, addition then subtraction and tells you what order to do the sums you see in an expression. Can you correctly do this sum? Write down your final value.

$$\dots? \dots = 2 ( 4 - 3 + (16/2) - 7 )$$

**HINT... you need to look at the brackets first. Look at the inner brackets where you see 16/2, complete this sum first. Then look at the second set of brackets and add and subtract those values. Lastly the 2 on the outside of the bracket means multiply everything in the brackets by 2. Good luck!!**

5.

**Identify equivalent expressions in different forms**

Q... You will find sometimes that we can write things out different ways. Can you tick the pairs of expressions that mean the same thing?

$$4(x+3) = 4x+3$$

$$\frac{6+2x}{2} = (1/2)(6+2x)$$

$$7+n+n+n = 3n+7$$

$$3+10 = 10-3$$

$$t+3+t+3+t+3 = 3t+9$$

**Hint... try replacing the letters with numbers and working out each left and right hand side of the equals sign and see if the values both sides are the same or not!**

**END OF PREPATORY ASSIGNMENT**

What to do now....

1. Ensure you have marked in each box if you feel confident in each topic or not (this will inform you and your tutor which activities you should do in the session)
2. Bring this yellow assignment with you to your next session and check with your tutor answers given
3. Add this to your folder of work IN ORDER YELLOW...GREEN...ORANGE... (and any BLUE you achieve)!

