

PROBLEM SOLVING

Explain using words what is the difference between the 2 main groups of functions: [+ & -] AND [x & /]

Give specific reference to the way these functions work when working with variables

Can you add the values: 2X and 5Y?

Yes

☐

No

☐

Why do you say this?

Complete or simplify the following equations:

$A + A =$

$2 \times 4Y =$

$2A + A =$

$2Y \times 4Y =$

$A \times A =$

$3A \times 2B =$

$7A - 4A =$

$2 + B =$

$5B - 3B =$

$5A + 2A + 9 =$

$8A \div 2 =$

$98Y - 28Y + 3B =$

What does BODMAS stand for?

What is the 3 main groups discussed within the BODMAS method?
(in order)

Step 1: _____

Step 2: _____

Step 3: _____

WHAT IS A TERM? _____

WHAT IS A SEPARATOR? _____

IDENTIFY THE SEPARATORS WITHIN THE FOLLOWING EQUATION:

By highlighting or putting the separators in blocks (Do not solve this equation)

$$3H - 65 \times 6 + (3 - 2) - (Y + 7) + 8 \times 8 - 3$$

IDENTIFY THE DIFFERENT TERMS WITHIN THE FOLLOWING EQUATIONS:

By highlighting or putting the different terms in blocks (Do not solve these equations)

$$5 + 12$$

$$2A + 4(3 + 8)$$

$$(14 + 8) - (61 - 32)$$

$$16 - (20 \div 4) + 9 \times 8$$

$$46 \times 14 - 12$$

$$3H - 65 \times 6 + (3 - 2) - (Y + 7)$$

COMPLETE THE FOLLOWING BASIC EQUATIONS USING THE BODMAS METHOD:

Remember to identify your terms and doing the terms in the correct order

$$6 + 4 \times 2 =$$

$$5 + 5 \times 4 =$$

$$4 + (4 \div 2) =$$

$$12 + 3 \times 2 =$$

$$8 + 6 - 3 =$$

$$2 \times 4 + 5 =$$

$$3 - 8 \div 4 =$$

$$(15 + 3) \times 2 =$$

COMPLETE THE FOLLOWING EQUATIONS USING THE BODMAS METHOD:

Remember to identify your terms and doing the terms in the correct order

$$6B + B \times 2 =$$

$$5 + 5B \times 4 =$$

$$4 + (4A \div 2) =$$

$$12A + 3 \times 2 =$$

$$8A + 6B - 3A =$$

$$2A \times 4 + 5 =$$

$$3 - 8 \div 4Y =$$

$$(15 + 3B) \times 2 =$$

COMPLETE THE FOLLOWING QUESTIONS AND MAKE CHANGES TO THESE EQUATIONS TO MAKE SURE THAT THE VARIABLE IS **ALONE ON THE LEFT SIDE OF THE EQUAL SIGN**

$$4 + A = 12$$

$$A - 3 = 9$$

$$2A = 12 + A$$

$$2A = 8$$

$$2A \times 4 = 16$$

$$2A + 4A = 8 + 2A$$

LIST THE 4 MAIN STEPS THAT WE ARE GOING TO USE WHEN SOLVING VARIABLES IN A LONG EQUATION

Step 1: _____

TIPS & THINGS TO LOOK OUT FOR:

Step 2: _____

TIPS & THINGS TO LOOK OUT FOR:

Step 3: _____

TIPS & THINGS TO LOOK OUT FOR:

Step 4: _____

TIPS & THINGS TO LOOK OUT FOR:

Solve A

$$12A = 4A + 2$$

$$8A - 2A + 40 - (6 + 2) + (4 \div 2) = A \times 2$$

$$4A - 2A + 4 + 2(6 + 2) = A + 2$$

Solve A

$$A - 10 = 5 + 2(6 + 2(2 + 4))$$

$$5 + (6 - 4) + 2(A + A) + 10 = 40 + 2A - 3$$
