HELPING YOU TO ACHIEVE YOUR POTENTIAL

Command words

Bug it!

Box - the command word so you know what is expected of you

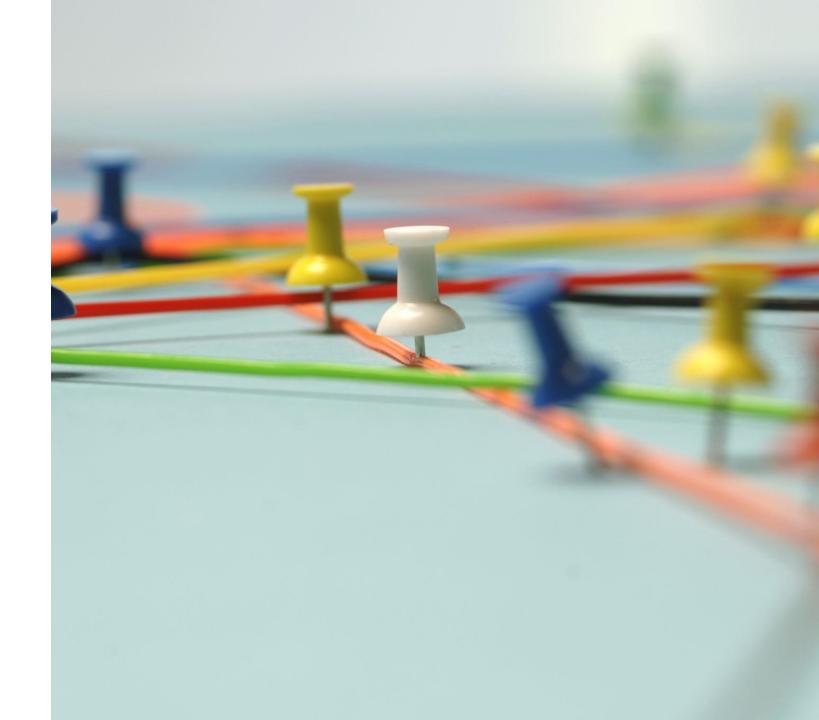**U**nderline - the key words needed for the answer

Glance - at how many marks this question is worth so you know how long to spend on this question

Core Subjects

- This is a list of the command words you need to know for your core subjects – Maths

- Do you know what each words expects you to do?

- Before you start the January mocks can you look through this power point and revise any command words that you need to know.

- The link on the next slide takes you to a list of the command words with questions you could look at

Maths – really useful link with examples that show you what to do for each command word

- https://www.mathsemporium.com/wp-content/uploads/empdocs/GCSE%20(9-1)%20A%20Teacher%20Guide%20To%20Command%20Words.pdf

Command words		What you need to know
1	Calculate	A calculator and some working will be needed.
2	Change	Usually convert from one unit to another; either using known metric unit conversions or the use of a conversion graph.
3	Complete	Fill in missing values. For example, on a probability tree diagram or a table of values.
4	Describe	Write a sentence that gives the features of the situation. For example, describing a transformation or trend in a graph.
5	Draw	Produce an accurate drawing (unless a sketch is being drawn). For example, draw a graph, draw an accurate elevation of a pyramid.

6	**Draw a sketch of...** **Sketch**	Produce a drawing that does not have to be drawn to scale **or** a graph that is drawn without working out each coordinate. For example, sketch a graph, sketch a cylinder.
7	**Expand**	Remove brackets.
8	**Expand and simplify**	Remove brackets and the collect like terms.
9	**Explain**	Write a sentence or a mathematical statement to show how you got to your answer or reached your conclusion.
10	**Express**	Re-write in another form, some working may be needed.
11	**Factorise**	Insert brackets by taking out common factors.

Command words		What you need to know
12	**Factorise fully**	Insert brackets by taking out **all** the common factors.
13	**Find**	Some working will be needed to get to the final answer.
14	**Give a reason**	Must be clear and accurate reasons. If the reasons are geometrical then make sure you: - provide a reason for each stage of working (if required), - use correct geometric terminology.
15	**Justify**	Show all working and/or give a written explanation.
16	**Prove**	More formal than 'show', all steps must be present. In the case of a geometrical proof, reasons must be given.

17	**Prove algebraically**	Use algebra in the proof.
18	**Show**	All working needed to get to a given answer **or** complete a diagram to show given information.
19	**Simplify**	Simplify the given expression
20	**Simplify fully**	Simplify the given expression. Answer must be given in its simplest form.
21	**Solve**	Find the solution of an equation or inequality.
22	**Solve algebraically**	Find the solution of an equation or inequality; algebraic manipulation **must** be shown.
23	**Write down**	No working is needed.
24	**Write**	No working needed for 1 mark questions. Working may be needed questions with more than 1 mark.
25	**Work out**	Some working will be needed in order to get the answer.

Question

	Command words	What you need to know	Examples
20	Simplify fully…	Simplify the given expression. Answer must be given in its simplest form.	Example 1 Example 2

Simplify fully – Example 1
Return to command word table

Nov 2018 – Paper 1H

17 Simplify fully $\dfrac{3x^2 - 8x - 3}{2x^2 - 6x}$

....

(Total for Question 17 is 3 marks)

Simplify fully – Example 2
Return to command word table

June 2018 – Paper 1H

15 (a) Factorise $a^2 - b^2$

....

(1)

(b) Hence, or otherwise, simplify fully $(x^2 + 4)^2 - (x^2 - 2)^2$

....

(3)

(Total for Question 15 is 4 marks)

Answers

17	$\dfrac{3x+1}{2x}$	M1	for $(3x+1)(x-3)$ **or** $2x(x-3)$	Accept $(2x+0)$ for the first two marks but not for the final answer
		A1	for $(3x+1)(x-3)$ **and** $2x(x-3)$	
		A1	$\dfrac{3x+1}{2x}$ oe	

Paper: 1MA1/1H

Question		Answer	Mark	Mark scheme	Additional guidance
15	(a)	$(a-b)(a+b)$	B1	cao	Accept reversed brackets
	(b)	$12(x^2+1)$	M1	for using 'a' $=x^2+4$ and 'b' $=x^2-2$ **OR** multiplying out both brackets, at least one fully correct	Correct 4 terms if not simplified or 3 terms if simplified
			M1	(dep) for a correct expression for ('a' + 'b')('a' − 'b') with no additional brackets, simplified or unsimplified eg $(x^2+4+x^2-2)(x^2+4-x^2+2)$ **or** $(2x^2+2)\times6$ **OR** ft for a correct expression without brackets, simplified or unsimplified eg $x^4+8x^2+16-x^4+4x^2-4$	
			A1	for $12(x^2+1)$ **or** $12x^2+12$ oe	