

Definitions and Guidelines:

All work should only have ONE EQUAL SIGN per line. All work should be able to be read UP and DOWN like a ladder

Simplify – this means to perform operations that make the expression smaller, (i) usually by collecting like terms, or (ii) applying exponents and/or exponent rules

Expand – the X in expand is the reminder to multiply out the expressions, usually using distributive property

Expand and Simplify – this is a combination of instructions, multiply any terms that can be multiplied, and then collect like terms

Solve – solve has a lot of similar characteristics as simplify, only at the end of a solve questions, you should have an answer for the variable, ie. $n = 5$
The variable must be isolated (coefficient of 1) and in the top (numerator) position.

Mr. Childs Model	My Trials #1	My Trial #2	Notes to myself
Simplify (exponents) $(3a^5)(2a)^4$ =	Simplify (exponents) $(4a^3)^2(2a)^3$ =	Simplify (exponents) $\frac{(8a^9)^2}{(4a^6)^2}$ =	
Simplify (collect like terms) $(5x^2 - 7x + 8) - (14x - 6x^2 - 12)$ =	Simplify (collect like terms) $(8x^2 - 9x + 12) + (14x - 15x^2 - 3)$ =	Simplify (collect like terms) $(8x^3 - 6x^2 - 4x + 3) - (11x - 2x^2 - 18 + x^3)$ =	
Expand (multiply) $5x^2 (3x + 2)$ =	Expand (multiply) $8x^2 (2x + 5)$ =	Expand (multiply) $-5x^3 (4x^3 + 7x^2 - 8x)$ =	
Expand and Simplify (multiply and collect like terms) $6(2x - 1) - 4(x - 5)$ =	Expand and Simplify (multiply and collect like terms) $2(3x - 5) + 7(x - 6)$ =	Expand and Simplify (multiply and collect like terms) $-6(2x - 5) - 4(-3x - 1)$ =	
Next Unit			
Solve (determine a value for the unknown / variable) $8x - 16 = 40$	Solve (determine a value for the unknown / variable) $5x - 15 = 35$	Solve (determine a value for the unknown / variable) $\frac{x}{3} - 14 = -8$	
Solve (use expand and simplify techniques to determine a value for the unknown or variable) $2(x - 5) = 4(3x - 15)$	Solve (use expand and simplify techniques to determine a value for the unknown or variable) $3(x - 4) = 7(x - 2)$	Solve (use expand and simplify techniques to determine a value for the unknown or variable) $4(2x - 4) = -8(x - 4)$	