

Topic: Proofs

Topic/Skill	Definition/Tips	Example
1. Expression	A mathematical statement written using symbols, numbers or letters ,	$3x + 2$ or $5y^2$
2. Equation	A statement showing that two expressions are equal	$2y - 17 = 15$
3. Identity	An equation that is true for all values of the variables An identity uses the symbol: \equiv	$2x \equiv x+x$
4. Formula	Shows the relationship between two or more variables	Area of a rectangle = length x width or $A = L \times W$
5. Coefficient	A number used to multiply a variable . It is the number that comes before/in front of a letter.	$6z$ 6 is the coefficient z is the variable
6. Odds and Evens	An even number is a multiple of 2 An odd number is an integer which is not a multiple of 2 .	If n is an integer (whole number): An even number can be represented by 2n or 2m etc. An odd number can be represented by 2n-1 or 2n+1 or 2m+1 etc.
7. Consecutive Integers	Whole numbers that follow each other in order.	If n is an integer: n, n+1, n+2 etc. are consecutive integers.
8. Square Terms	A term that is produced by multiply another term by itself.	If n is an integer: n^2, m^2 etc. are square integers
9. Sum	The sum of two or more numbers is the value you get when you add them together.	The sum of 4 and 6 is 10
10. Product	The product of two or more numbers is the value you get when you multiply them together.	The product of 4 and 6 is 24
11. Multiple	To show that an expression is a multiple of a number, you need to show that you can factor out the number .	$4n^2 + 8n - 12$ is a multiple of 4 because it can be written as: $4(n^2 + 2n - 3)$

