Fundamental Algebra Concepts A2 part 1:

Properties of Exponents

Property	Examples
Product of Powers $a^m \bullet a^n = a^{m+n}$	
Power of a Power $(a^m)^n = a^{mn}$	
Negative Exponent $a^{-n} = \frac{1}{a^n} = \left(\frac{1}{a}\right)^n$	
Zero as an Exponent $a^0 = 1, a \neq 0$	
Absolute Value $\lvert a^2 \rvert = \lvert a \rvert^2 = a^2$	
Power of Product $(ab)^m = a^m b^m$	
Quotient of Powers $\frac{a^m}{a^n} = a^{m-n}$	
Power of a Quotient $\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}, b \neq 0$	

Additional Examples…