

Stage 8 – Algebra: Algebraic proficiency, Tinkering

Know it!



Knowledge	
I know...	How to use and interpret algebraic notation, including: $a^2 b$ in place of $a \times a \times b$, coefficients written as fractions rather than as decimals
I know...	Simplify an expression involving terms with combinations of variables (e.g. $3a^2b + 4ab^2 + 2a^2 - a^2b$)
I know...	Factorise an algebraic expression by taking out common factors
I know...	How to use the laws of indices (including the 0 index)
I know...	How to change the subject of a formula

Link it!



Backward	Forward
Algebraic notation Collecting like terms Expanding a bracket Substitution	Quadratic expressions Proof – identities Negative & Fractional Indices

Prove it!



What is wrong with this statement and how can it be corrected:
 $5^2 \times 5^4 = 5^8$?

Jenny thinks that if $y = 2x + 1$ then $x = (y - 1)/2$.
 Kenny thinks that if $y = 2x + 1$ then $x = y/2 - 1$.
 Who do you agree with? Explain your thinking.

Say it!



Vocabulary	Definition
Product	
Variable	
Coefficient	
Common factor	
Factorise	
Power/Index/Indices	
Subject (of a formula)	