## LO: Unit simplify expressions using the index laws We already know the index laws...

 $\frac{4 \times 4 \times 4 \times 4 \times 4 \text{ gives us } 4^3}{4 \times 4}$ 

Quotient Law of Indices: If two terms with the same base are divided then their indices are subtracted to simplify them.

$$\mathbf{n}^{a} \div \mathbf{n}^{b} = \mathbf{n}^{a-b} \text{ or even } \underline{\mathbf{m}^{a}} = \mathbf{m}^{a-b}$$

m<sup>b</sup>



## LO: Lon simplify expressions using the index laws We already know the index laws...

 $64 = 8^2 = 4^3 = 2^6$ 

Bracket Law of Indices: If a term is in brackets then the indices are multiplied to simplify them.

 $(n^{a})^{b} = n^{ab} \text{ or even } [(m^{a})^{b}]^{c} = m^{abc}$ 

