# Indices Worked Examples

Law of Indices referred to here are explained in the accompanying PowerPoint Presentation.

**Example 1:**

**Simplify the following:**

Firstly multiply . ) by applying Law 1 of Indices- add the indices:

=

Then we divide by by applying Law 2 of Indices - subtract the indices:

=

**Example 2:**

**Simplify the following:**

Firstly we deal with . by applying Law 6 of Indices:

. This can also be written as . = =

We then divide by by subtracting the indices = =

**Example 3:**

**Simplify the following expressing the answer with positive indices only:**

Applying Law 3 of Indices:

= = .

=

for : multiplying it’s index by 4 ;

for : multiplying it’s index by 4

giving us .

Now, for

Applying Law 2 of Indices:

= = a

=

Answer: