

Example :-

$$\text{Simplify } (2x^3)^4$$

Deal with the power of 2 first  
(i.e.  $2^4$ ) then the indices.

$$(2x^3)^4 = 16x^{12}$$

**Simplify** as far as possible :-

(a)  $(3x^4)^2$

(b)  $(5x^2)^3$

(c)  $(4x^5)^3$

(d)  $(10x^3)^3$

(e)  $(3x^4)^5$

(f)  $(-2x^4)^6$

(g)  $(15x^{2.5})^2$

(h)  $(3x^{0.5})^6$

(i)  $(-3x^{-4})^5$

(a)  $\left(\frac{1}{2}x^3\right)^2$

(b)  $\left(\frac{2}{3}x^4\right)^3$

(c)  $(0.25x^6)^3$