

Example :-

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) $(0.25x^6)^3$