

Page 3 of 4

Max John Baker
Max John Baker
2013483

27/10/2020 15:37

4.
(i) $x^8 \times x \times x^9$

$$x^8 \times x' \times x' \times x^9$$

$$8 + 1 + 1 + 9 = 19$$

$$= x^{19}$$

(ii)

$$(2x^3)^3$$

$$2^3 (x^3)^3$$

$$= 8x^9$$

(iii)

$$\frac{x^{12} \times x^8}{x}$$

$$\frac{x^{12} \times x \times x \times x^8}{x}$$

$\rightarrow$

$$\frac{x^{21}}{x}$$

$$\frac{x^{21}}{x}$$

$$= x^{20}$$

$$\downarrow$$
$$x^{20}$$

(iv) $5x^2 \times 3x^4$

$$5 \times 3 = 15 \rightarrow 15x^2 \times x^4$$

$$15x^{2+4} = 15x^6$$