

03/11/2020 Barry Bradshaw 1909431

Time 15:00

Introduction to Mathematics and science

ACHA3000

$$\textcircled{i)} \quad x^4 \times x^6 \times x$$

$$4 + 6 + 1 = 11$$

$$= x^{11}$$

$$\textcircled{ii)} \quad 2x^2 \times 3x^2 \times 2x$$

$$2 + 2 + 1 = 5$$

$$2 \times 3 \times 2 = 12$$

$$= 12x^5$$

$$\textcircled{iii)} \quad \frac{x^4 \times x^3 \times x^2}{x^9}$$

$$4 + 3 + 2 = 9$$

$$9 - 9 = 0$$

$$\frac{x^9}{x^9} = x^0 = 1$$

$$\textcircled{iv)} \quad (3x^2)^3$$

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

$$3^3 = 27$$

$$27x^{2 \times 3}$$

$$27x^6$$

$$\textcircled{v)} \quad \sqrt{x} \times \sqrt{x}$$

$$\sqrt{a} \times \sqrt{a} = a$$

$$= x$$