

Maths Paper 1

ACHA 3000

210 3851

i) $x^6 \times x^9 \times x^2 \times x$
 $x^{14} \times x^3$
 x^{17}

2.i) $7x - 1 = 5x + 4$

$$7x = 5x + 5$$

$$2x = 5$$

$$x = 2.5$$

ii) $(2x^2)^4 \times 3x^3$
 $16x^8 \times 3x^3$
 $48x^{11}$

ii) $10(3x+2) = 7(-2x-1)$

$$30x + 20 = -14x - 7$$

$$44x = -27$$

$$x = -\frac{27}{44}$$

iii) $\frac{x^2 \times x^{10} \times x}{x^3}$
 $\frac{x^{13}}{x^3}$
 x^{10}

iii) $\frac{3}{(2x+1)} = \frac{4}{(x-1)}$

$$3(x-1) = 4(2x+1)$$

$$3x - 3 = 8x + 4$$

$$-7 = 5x$$

$$-\frac{7}{5} = x$$

iv) $2\sqrt{x} \times 3\sqrt{x}$
 $x^{1/2} \times x^{1/2}$
 $x^{5/6}$

iv) $(x+2)^2 = (x+3)(x+5)$

$$x^2 + 4x + 4 = x^2 + 8x + 15$$

$$4x + 4 = 8x + 15$$

$$-11 = 4x$$

$$-2.75 = x$$

v) 1
~~1~~ x^0

$$\log 3$$