

P2 of 4

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

$$3(x-1) = 3x - 3$$

$$4(2x+1) = 8x + 4$$

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

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

$$3x = 8x + 7$$

$$3x - 8x = 8x + 7 - 8x$$

$$-5x = 7$$

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

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

$$\frac{x^2 + 2x \times 2 + 2^2}{(x+3)(x+5)} = \frac{x^2 + 4x + 4}{x^2 + 8x + 15}$$

3)

i. $x^2 + 9x + 14 = 0$

$$(x+7)(x+2) = 0$$

$$x+7=0 \quad x+2=0$$

$$x=-7 \quad x=-2$$

ii. $x^2 - 7x + 10 = 0$

$$(x-5)(x-2) = 0$$

$$x-5=0 \quad x-2=0$$

$$x=5 \quad x=2$$

iii. $x^2 + 8x - 20 = 0$

$$(x+10)(x-2) = 0$$

$$x+10=0 \quad x-2=0$$

$$x=-10 \quad x=2$$