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Max John Baker
20/3483

03/11/2020

$$(iii) \quad \frac{5x+3}{4} = \frac{2x-1}{9}$$

$$9(5x+3) = 4(2x-1)$$

$$45x + 27 = 8x - 4 \Rightarrow 45x - 8x + 27 = -4$$

$$45x - 8x = -4 - 27$$

$$37x = -4 - 27 = 37x = -31$$

$$x = -\frac{31}{37}$$

$$3. \quad (i) \quad x^2 + 10x + 21 = 0$$

$$x^2 + 7x + 3x + 21 = 0 = x(x+7) + 3x+21 = 0$$

$$x(x+7) + 3(x+7) = 0$$

$$x+7=0$$

$$x = -7$$

$$x+3=0$$

$$x = -3$$

$$(ii) \quad x^2 - 3x + 2 = 0$$

$$\downarrow$$
$$x(x-1) - 2(x-1) = 0 \Rightarrow (x-1)(x-2)$$

$$x-1=0$$

$$x=1$$

$$x-2=0$$

$$x=2$$

$$(iii) \quad x^2 + 12x + 20 = 0$$

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

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

$$x+10=0$$

$$x = -10$$

$$x+2=0$$

$$x = -2$$