

ALHA 3000 2117715

2,

$$(i) \quad \underset{+1}{7x} - \underset{+1}{1} = \underset{+1}{5x} + \underset{+1}{4}$$

$$\underset{-5}{7x} = \underset{-5}{5x} + \underset{-5}{5}$$

$$\underset{\div 2}{2x} = \underset{\div 2}{5}$$

$$\boxed{x = \frac{5}{2}}$$

$$(iv) \quad \cancel{(x+2)^2} = (x+3)(x+5)$$

$$x^2 + 4x + 4 =$$

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

$$\underset{-20}{30x} + \underset{-20}{20} = \underset{-20}{-14x} - \underset{-20}{7}$$

$$\underset{+14x}{30x} = \underset{+14x}{-14x} - \underset{+14x}{27}$$

$$44x = -27$$

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

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

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

$$\underset{+3}{3x} - \underset{+3}{3} = \underset{+3}{8x} + \underset{+3}{4}$$

$$\underset{-8x}{3x} = \underset{-8x}{8x} + \underset{-8x}{7}$$

$$\underset{\div -5}{-5x} = \underset{\div -5}{7}$$

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

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