

2AD 1a

$$x^2 + 2 > (x+1)(x-1)$$

$$x^2 + 2 > (x^2 - 1)$$

$$\cancel{x^2} - \cancel{x^2} > -1 - 2$$

$$0 > -3$$

2AD 1b

$$(4x-3)(2x-1) < 8x^2 - 7$$

$$8x^2 - 4x - 6x + 3 < 8x^2 - 7$$

$$-10x < -3 - 3$$

$$-10x < -6 \quad :|-10$$

$$x > \frac{6}{10}$$

$$x > \frac{3}{5}$$

2AD 2a

$$\frac{x+1}{2} > \frac{2x-3}{3} \quad \cdot 6$$

$$3(x+1) > 2(2x-3)$$

$$3x+3 > 4x-6$$

$$3x-4x > -6-3$$

$$-x > -9 \quad \cdot|-1$$

$$x < 9$$