

$$\frac{4x-13}{(x+2)(2x-3)} = \frac{A}{x+2} + \frac{B}{2x-3}$$

$$\frac{4x-13}{(x+2)(2x-3)} = \frac{A(2x-3) + B(x+2)}{(x+2)(2x-3)}$$

$$4x-13 = A(2x-3) + B(x+2)$$