

Partialbruchzerlegungen

Bestimme nachfolgend A, B, C, a, b, c, d !

$$1) \frac{5x-9}{(x+1)(3x-4)} = \frac{A}{x+1} + \frac{B}{3x-4}$$

$$2) \frac{5x^2-20x+11}{(x+1)(x-2)^2} = \frac{A}{x+1} + \frac{B}{(x-2)^2} + \frac{C}{x-2}$$

$$3) \frac{10x-19}{2x^2+5x-3} = \frac{A}{ax+b} + \frac{B}{cx+d}$$

$$4) \frac{7x^2-7x-15}{x^3+2x^2-7x+4} = \frac{A}{ax+b} + \frac{B}{(cx+d)^2} + \frac{C}{cx+d}$$

Berechne mittels Polynomdivision und Horner-Schema:

$$1) \frac{3x^3-23x^2+19x-35}{x-7} =$$

$$2) \frac{4x^3-5x+7}{x+2} =$$