1 Partialbruchzerlegung

a)

$$\frac{2}{x^2-1} = \frac{1}{x-1} + \frac{-1}{x+1}$$

b)

$$\frac{x^3-2x-35}{x^2-2x-15} = x+2+\frac{10}{x-5}+\frac{7}{x+3}$$

c)

$$\frac{x+1}{x^3-2x^2+x-2} = \frac{3}{5(x-2)} - \frac{3x+1}{5(x^2+1)}$$

d)

$$\frac{x+3}{x^4-5x^2+4} = -\frac{2}{3(x-1)} + \frac{1}{3(x+1)} + \frac{5}{12(x-2)} - + \frac{1}{12(x+2)}$$

e)

$$\frac{x^2+1}{x(x-1)^3} = \frac{1}{x-1} + \frac{2}{(x-1)^2} + \frac{2}{(x-1)^3}$$

f)

$$\frac{2x^2-4x+3}{x^4-6x^3+13x^2-12x+4} = \frac{2}{x-1} + \frac{1}{(x-1)^2} - \frac{2}{x-2} + \frac{3}{(x-2)^2}$$