

a) $\frac{x^2 - 3x + 2}{x^2 - x - 2}$

(Soluc: $\frac{x-1}{x+1}$)

b) $\frac{x^2 + x - 2}{x^2 + 3x + 2}$

(Soluc: $\frac{x-1}{x+1}$)

c) $\frac{x^2 - 5x + 6}{x^2 + 5x + 6}$

(Soluc: irreducible)

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

(Soluc: $\frac{2x-1}{2x+1}$)

e) $\frac{x^3 - 6x^2 + 11x - 6}{x^3 - 2x^2 - x + 2}$

(Soluc: $\frac{x-3}{x+1}$)

f) $\frac{x^2 + x + 2}{x^2 - x + 1}$

(Soluc: irreducible)

g) $\frac{x^3 + 6x^2 + 11x + 6}{x^3 - 4x^2 + x + 6}$

(Soluc: $\frac{x^2 + 5x + 6}{x^2 - 5x + 6}$)

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

(Soluc: $x-1$)

i) $\frac{4x^2 - 1}{4x^2 + 4x + 1}$

(Soluc: $\frac{2x-1}{2x+1}$)

j) $\frac{x^3 - x^2 - 10x - 8}{x^2 - 2x - 4}$

(Soluc: irreducible)

k) $\frac{x^3 - 2x^2 - 5x + 6}{x^3 + 4x^2 + x - 6}$

(Soluc: $\frac{x-3}{x+3}$)

l) $\frac{4x^3 + 7x^2 + 2x - 1}{x^3 + 3x^2 + 3x + 1}$

(Soluc: $\frac{4x-1}{x+1}$)

m) $\frac{2x^3 - x^2 - 8x + 4}{x^3 + 8}$

(Soluc: $\frac{2x^2 - 5x + 2}{x^2 - 2x + 4}$)

n) $\frac{4x^3 - 2x^2 - 4x + 2}{2x^3 - 5x^2 + 4x - 1}$

(Soluc: $\frac{2x+2}{x-1}$)

o) $\frac{2x^3 - x^2 - 2x + 1}{2x^3 - 5x^2 + 4x - 1}$

(Soluc: $\frac{x+1}{x-1}$)

p) $\frac{x^3 - 3x^2 - x + 3}{x^3 - 3x^2 + 4x - 12}$

(Soluc: $\frac{x^2 - 1}{x^2 + 4}$)

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

(Soluc: $\frac{1}{x-1}$)

r) $\frac{4x^3 - 8x^2 - x + 2}{2x^3 - x^2 - 8x + 4}$

(Soluc: $\frac{2x+1}{x+2}$)

s) $\frac{x^2 - 4}{x^3 - 7x - 6}$

(Soluc: $\frac{x-2}{x^2 - 2x - 3}$)