Scomposizione di frazioni algebriche

Periodo 2 - UdA 7

Scomporre le seguenti frazioni algebriche

[1] $\frac{-5x^3}{5x+6+x^2}$

[2] $\frac{-16x-x^5-8x^3}{8-2x}$

[3] $\frac{25x^2-9x^4}{9x+3x^2-30}$

[4] $\frac{24x-4x^2-4x^3}{-x^4+81}$

[5] $\frac{-256-x^8}{5x^3-10x+5x^2}$

[6] $\frac{3x^4-9x^2-12}{16x-81x^5}$

[7] $\frac{-12x^2-27}{12x-18-2x^2}$

[8] $\frac{4x^3-2x^4+16x^2}{-9+16x^2}$

[9] $\frac{4x^5+16x^3}{-3+6x^4-3x^8}$

SOLUZIONI

Scomposizione di frazioni algebriche — Periodo 2 - UdA 7

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

[2] $$\frac{x\left(x^2+4\right)^2}{2(x-4)}$$

[3] $$-\frac{x^2(3x+5)(3x-5)}{3(x-2)(x+5)}$$

[4] $$\frac{4x(x+3)(x-2)}{\left(x^2+9\right)(x+3)(x-3)}$$

[5] $$-\frac{\left(x^8+256\right)}{5x(x+2)(x-1)}$$

[6] $$-\frac{3\left(x^2+1\right)(x+2)(x-2)}{x\left(9x^2+4\right)(3x+2)(3x-2)}$$

[7] $$\frac{3\left(4x^2+9\right)}{2(x-3)^2}$$

[8] $$-\frac{2x^2(x-4)(x+2)}{(4x+3)(4x-3)}$$

[9] $$-\frac{4x^3\left(x^2+4\right)}{3\left(x^2+1\right)^2(x+1)^2(x-1)^2}$$