

## Ejercicio 6

$$\frac{(x^6 - 1)(x+1)}{(x^2 - 1)(x + \frac{1}{x} + 1)}$$

$$\begin{array}{r} x^6 - 6 + 1 \\ (x^2 - 1) x^4 \\ \hline x^6 - 7 \\ x^8 - x^4 \end{array}$$

$$\begin{aligned} & x^{24} + (x^8 / 7) \\ & x^3 + 7 \\ & \boxed{x+1} \end{aligned}$$

## Ejercicio 8

$$\frac{a^{10} + a^8 + a^6 + \cancel{a^4} + \cancel{a^2} + \cancel{1}}{\cancel{a^4} + \cancel{a^2} + 1}$$

$$a^{10} + a^8 + a^6$$

$$a^5 + a^4 + a^3$$

-1      -2      -3

$$a^4 + a^2 + 1$$

$$a^6 + 1$$