

Ex 2.2.5

$$a) x^{\textcircled{4}} - 13x^{\textcircled{2}} + 36$$

$$= (x^2)^2 - 13x^2 + 36$$

$$\underline{y=x^2} \quad = \quad y^2 - 13y + 36$$

changement variable :  $x^2 = y$

$$\underline{SP} \quad = \quad (y-4)(y-9)$$

3 · 12  
4 · 9  
6 · 6

$$\underline{y=x^2} \quad = \quad (x^2-4)(x^2-9)$$

$$\underline{PR} \quad = \quad \underline{\underline{(x+2)(x-2)(x+3)(x-3)}}$$

Ex suppl

$$x^{\textcircled{6}} + 7x^{\textcircled{3}} - 8$$

chgmt de variable

$$\underline{y=x^3} \quad = \quad y^2 + 7y - 8$$

$$= (y+8)(y-1)$$

$$\underline{y=x^3} \quad = \quad (x^3+8)(x^3-1)$$

$$\underline{PR} \quad = \quad (x+2)(x^2-2x+4)(x-1)(x^2+x+1)$$

$$a^3 + b^3 = (a+b)(a^2 - ab + b^2)$$