

27/1/2020

419 $x^2y - 4y - x - 2 = [(x+2)(xy - 2y - 1)]$

$$= y(x^2 - 4) - (x + 2) =$$

$$= y(x-2)(x+2) - (x+2) =$$

$$= (x+2)[y(x-2) - 1] = (x+2)(xy - 2y - 1)$$

411 $\frac{1}{10}x^6 - 40x^2 = \frac{10}{100}x^6 - 40x^2 =$

$$= 10x^2 \left(\frac{1}{100}x^4 - 4 \right) = 10x^2 \left(\frac{1}{10}x^2 - 2 \right) \left(\frac{1}{10}x^2 + 2 \right)$$

406 $2x^3 - 18x^2 + 54x - 54 = [2(x-3)^3]$

$$= 2(x^3 - 9x^2 + 27x - 27) =$$

$$= 2(x-3)^3$$

366

$$x^4 + x^3 - x^2 + x - 2$$

DIVISORI DI -2

 $\pm 1 \quad \pm 2$

$$1 \mapsto 1+1-1+1-2=0 \quad \text{OK!}$$

$$\begin{array}{c|ccccc} & 1 & 1 & -1 & 1 & -2 \\ \hline 1 & & 1 & 2 & 1 & 2 \\ \hline & 1 & 2 & 1 & 2 & // \end{array}$$

$$\begin{aligned} & (x^3 + 2x^2 + x + 2)(x - 1) = \\ & = [x^2(x + 2) + (x + 2)](x - 1) = \\ & = (x + 2)(x^2 + 1)(x - 1) \end{aligned}$$

→ ripetere anche x=0 con Ruffini

DIVISORI

 $\pm 1 \quad \pm 2$

$$1 \mapsto 1+2+1+2 \neq 0$$

$$-1 \mapsto -1+2-1+2 \neq 0$$

$$-2 \mapsto -8+8-2+2=0 \quad \text{OK}$$

$$\begin{array}{c|ccc} & 1 & 2 & 1 & 2 \\ \hline -2 & & -2 & 0 & -2 \\ \hline & 1 & 0 & 1 & // \end{array}$$

$$x^3 + 2x^2 + x + 2 = (x^2 + 0 \cdot x + 1)(x + 2)$$

$$x^4 + x^3 - x^2 + x - 2 = (x^2 + 1)(x + 2)(x - 1)$$