

$$3x^5 - 2x^3 + 4x^2 + x - 6$$

$$\begin{array}{r} -3x^5 \\ + \frac{3}{2}x^2 \end{array}$$

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

$$\begin{array}{r} 2x^3 \\ - 1 \end{array}$$

$$\parallel \frac{11}{2}x^2 + x - 7$$

$$2x^3 - 1$$

$$\frac{3}{2}x^2 - 1$$

$$a \cdot 5 + b \cdot 2 = 1 \quad a = 1 \quad b = -2$$

$$5 = 2 \cdot 2 + 1$$

$$1 \stackrel{!}{=} 5 + 2(-2)$$

$a + b\sqrt{-1}$ a, b reals

(a, b) prime

$$\begin{array}{r} x^4 - x^3 + x^2 - x + 1 \\ -x^4 - x^3 - x^2 \\ \hline -2x^3 - x + 1 \end{array}$$

$$\begin{array}{r} x^2 + x + 1 \\ \hline x^2 - 2x \end{array}$$

$x^4 - x^3 + x^2 - x + 1$ non è divisibile per
 $x^2 + x + 1$