

Lezione 47

$$129x^2 + 200x + 71$$

$$\begin{array}{r|l} 9159 & 3 \\ 3053 & 43 \\ 71 & 71 \\ \hline & 1 \end{array}$$

$$p = 9159$$

$$s = 200$$

$$\begin{array}{l} 1 \cdot 9159 \\ 3 \cdot 3053 \\ 43 \cdot 213 \\ 71 \cdot 129 \end{array}$$

$$x_1 = 129 \quad x_2 = 71$$

$$129x^2 + 129x + 71x + 71 =$$

$$= 129x(x+1) + 71(x+1) \rightarrow (x+1)(129x+71)$$

$$4x^4 - 13x^2 + 3 =$$

$$= 4t^2 - 13t + 3 =$$

$$= 4t^2 - 1t - 12t + 3 =$$

$$= t(4t-1) - 3(4t-1) =$$

$$= (4t-1)(t-3) =$$

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

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

$$x^2 = t$$

$$p = 12$$

$$s = -13$$

$$\begin{array}{l} 1 \cdot 12 \\ 2 \cdot 6 \\ 3 \cdot 4 \end{array}$$

$$(-1)$$

$$(-12)$$

$$\rightarrow (x-1)(2x+1)(x^2-3)$$

$$\begin{aligned}
 &6a^2 - 19ac + 10c^2 \\
 &\underline{6a^2 - 19ca + 10c^2} \\
 &= \underline{6a^2 - 4ca} - \underline{15ca + 10c^2} = \\
 &= 2a(3a - 2c) - 5c(3a - 2c) = \\
 &= \underline{(3a - 2c)(2a - 5c)}
 \end{aligned}$$

$$\begin{aligned}
 p &= 60c^2 \\
 s &= -19c
 \end{aligned}$$

$2 \cdot 60c$
$2c \cdot 30c$
$3c \cdot 20c$
$4c \cdot 15c$
$6c \quad 10c$
$-4c + (-15c)$
$= -19c$