Polinomios para factorizar.

Resumen

Ejercicios de polinomios generados automáticamente.

$x_2 = 3[2]$, significa que la segunda raíz obtenida es 3 y tiene multiplicidad 2, es decir, el polinomio tiene 2 factores $(x-2)$. Si entre corchetes no aparece ningún número, significa que su multiplicidad es 1.

Nota: Este documento se ha generado automáticamente utilizando Sage, LaTeX y sagetex para la integración de las 2 herramientas mencionadas.

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Índice general

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1. Sin polinomios irreducibles de grado 2

1.1. Hasta 0 raices fraccionarias

Polinomios de grado 2

$P_1(x) = -x^2 - 4x - 4$
$P_2(x) = -2x^2 + 2$
$P_3(x) = 2x^2 - 8x + 6$
$P_4(x) = 2x^2 - 2x - 4$
$P_5(x) = x^2 - 5x + 6$
$P_6(x) = x^2 - 5x + 6$
$P_7(x) = -x^2 + 2x - 1$
$P_8(x) = 2x^2 - 10x + 12$

Polinomios de grado 3

$P_9(x) = -2x^3 + 6x^2 + 2x - 6$
$P_{10}(x) = -2x^3 + 6x + 4$
$P_{11}(x) = x^3 - 7x^2 + 15x - 9$
$P_{12}(x) = x^3 - 4x^2 + x + 6$
$P_{13}(x) = x^3 - x^2 - 4x + 4$
$P_{14}(x) = x^3 - 7x - 6$
$P_{15}(x) = 2x^3 - 4x^2 - 2x + 4$
$P_{16}(x) = x^3 - 2x^2 - x + 2$

Polinomios de grado 4

$P_{17}(x) = x^4 - 5x^3 + x^2 + 21x - 18$
$P_{18}(x) = -2x^4 - 6x^3 + 4x^2 + 24x + 16$
$P_{19}(x) = -2x^4 + 8x^3 - 4x^2 - 8x + 6$
$P_{20}(x) = -2x^4 + 18x^2 + 8x - 24$
$P_{21}(x) = x^4 - 5x^3 + 2x^2 + 20x - 24$
$P_{22}(x) = 2x^4 - 16x^2 + 32$
$P_{23}(x) = 2x^4 + 12x^3 + 26x^2 + 24x + 8$
$P_{24}(x) = x^4 - 8x^3 + 23x^2 - 28x + 12$

Polinomios de grado 5

$P_{25}(x) = -2x^5 + 6x^4 + 4x^3 - 12x^2 - 2x + 6$
$P_{26}(x) = -2x^5 - 4x^4 + 18x^3 + 44x^2 - 8x - 48$
$P_{27}(x) = x^5 - 3x^4 - 4x^3 + 16x^2 - 16$
$P_{28}(x) = x^5 - 10x^4 + 30x^3 - 135x + 162$

$$P_{29}(x) = 2x^5 - 16x^3 - 12x^2 + 14x + 12$$
$$P_{30}(x) = x^5 + 3x^4 - x^3 - 7x^2 + 4$$
$$P_{31}(x) = x^5 - 4x^3 - 2x^2 + 3x + 2$$
$$P_{32}(x) = 2x^5 + 6x^4 - 8x^3 - 32x^2 + 32$$

1.2. Hasta 1 raices fraccionarias

Polinomios de grado 2

$$P_{33}(x) = 2x^2 - 5x + 2$$
$$P_{34}(x) = 3x^2 + 5x - 2$$
$$P_{35}(x) = 2x^2 - 3x - 2$$
$$P_{36}(x) = 3x^2 + x - 2$$
$$P_{37}(x) = 3x^2 + 5x - 2$$
$$P_{38}(x) = 3x^2 + 4x - 4$$
$$P_{39}(x) = 2x^2 + 3x + 1$$
$$P_{40}(x) = 3x^2 - 5x - 2$$

Polinomios de grado 3

$$P_{41}(x) = 3x^3 + 10x^2 + 9x + 2$$
$$P_{42}(x) = 2x^3 + x^2 - 4x - 3$$
$$P_{43}(x) = 3x^3 + 8x^2 + 7x + 2$$
$$P_{44}(x) = x^3 + 2x^2 - 4x - 8$$
$$P_{45}(x) = -2x^3 + 14x^2 - 32x + 24$$
$$P_{46}(x) = 8x^3 + 21x^2 + 7x - 6$$
$$P_{47}(x) = 2x^3 - x^2 - 13x - 6$$
$$P_{48}(x) = x^3 - 2x^2 - x + 2$$

Polinomios de grado 4

$$P_{49}(x) = 3x^4 - 7x^3 - 10x^2 + 28x - 8$$
$$P_{50}(x) = -2x^4 + 16x^2 - 32$$
$$P_{51}(x) = 2x^4 + 5x^3 - 5x - 2$$
$$P_{52}(x) = 2x^4 - 5x^3 - 8x^2 + 17x - 6$$
$$P_{53}(x) = 2x^4 - 3x^3 - 7x^2 + 12x - 4$$
$$P_{54}(x) = x^4 + x^3 - 7x^2 - 13x - 6$$
$$P_{55}(x) = 3x^4 - 11x^3 - x^2 + 19x + 6$$
$$P_{56}(x) = 3x^4 + 2x^3 - 13x^2 - 8x + 4$$

Polinomios de grado 5

$$P_{57}(x) = 7x^5 + 18x^4 - 23x^3 - 78x^2 - 20x + 24$$

$$P_{58}(x) = 3x^5 - 20x^4 + 36x^3 + 2x^2 - 39x + 18$$
$$P_{59}(x) = x^5 - x^4 - 8x^3 + 8x^2 + 16x - 16$$
$$P_{60}(x) = 3x^5 - 14x^4 + 22x^3 - 12x^2 - x + 2$$
$$P_{61}(x) = 3x^5 - 5x^4 - 19x^3 + 17x^2 + 16x - 12$$
$$P_{62}(x) = 2x^5 - x^4 - 15x^3 + 10x^2 + 28x - 24$$
$$P_{63}(x) = 7x^5 - 31x^4 + 12x^3 + 112x^2 - 160x + 48$$
$$P_{64}(x) = 2x^5 - 8x^4 - 6x^3 + 44x^2 - 8x - 48$$

1.3. Hasta 2 raices fraccionarias

Polinomios de grado 2

$$P_{65}(x) = 7x^2 + 11x - 6$$
$$P_{66}(x) = -x^2 + x + 6$$
$$P_{67}(x) = 3x^2 - 7x + 2$$
$$P_{68}(x) = 3x^2 + 8x + 4$$
$$P_{69}(x) = 14x^2 - 13x + 3$$
$$P_{70}(x) = 2x^2 - 5x - 3$$
$$P_{71}(x) = 9x^2 + 6x + 1$$
$$P_{72}(x) = 6x^2 + 5x + 1$$

Polinomios de grado 3

$$P_{73}(x) = 3x^3 + 10x^2 + 4x - 8$$
$$P_{74}(x) = 4x^3 - 20x^2 + 27x - 9$$
$$P_{75}(x) = 8x^3 - 11x^2 - 45x + 18$$
$$P_{76}(x) = 16x^3 - 14x^2 - 21x + 9$$
$$P_{77}(x) = 6x^3 + x^2 - 5x - 2$$
$$P_{78}(x) = 3x^3 - 8x^2 + 3x + 2$$
$$P_{79}(x) = 6x^3 - 7x^2 + 1$$
$$P_{80}(x) = 6x^3 + 5x^2 - 3x - 2$$

Polinomios de grado 4

$$P_{81}(x) = 2x^4 - 13x^3 + 25x^2 - 8x - 12$$
$$P_{82}(x) = 8x^4 - 35x^3 - 12x^2 + 153x - 54$$
$$P_{83}(x) = 15x^4 - 64x^3 + 93x^2 - 56x + 12$$
$$P_{84}(x) = 9x^4 + 9x^3 - 19x^2 - x + 2$$
$$P_{85}(x) = 2x^4 - 10x^3 + 4x^2 + 40x - 48$$
$$P_{86}(x) = 6x^4 + 5x^3 - 23x^2 - 20x - 4$$
$$P_{87}(x) = 9x^4 + 36x^3 + 35x^2 - 4x - 4$$

$P_{88}(x) = 6x^4 + 23x^3 + 28x^2 + 13x + 2$

Polinomios de grado 5

$P_{89}(x) = 3x^5 - 8x^4 - 24x^3 + 38x^2 + 69x + 18$
$P_{90}(x) = 14x^5 - 27x^4 + 2x^3 + 24x^2 - 16x + 3$
$P_{91}(x) = 15x^5 - 19x^4 - 99x^3 + 43x^2 + 72x - 36$
$P_{92}(x) = 9x^5 - 15x^4 - 2x^3 + 14x^2 - 7x + 1$
$P_{93}(x) = 24x^5 + 55x^4 - 88x^3 - 232x^2 - 32x + 48$
$P_{94}(x) = 9x^5 - 9x^4 - 10x^3 + 10x^2 + x - 1$
$P_{95}(x) = 5x^5 - 23x^4 + 2x^3 + 66x^2 + 9x - 27$
$P_{96}(x) = 3x^5 - 10x^4 - 3x^3 + 38x^2 - 36x + 8$

1.4. Hasta 3 raices fraccionarias

Polinomios de grado 3

$P_{97}(x) = 12x^3 + 23x^2 - 8x - 12$
$P_{98}(x) = 9x^3 - 36x^2 + 29x - 6$
$P_{99}(x) = 9x^3 + 27x^2 + 20x + 4$
$P_{100}(x) = x^3 + 2x^2 - 4x - 8$
$P_{101}(x) = 168x^3 - 247x^2 + 117x - 18$
$P_{102}(x) = 27x^3 - 9x^2 - 12x + 4$
$P_{103}(x) = 18x^3 - 27x^2 + 13x - 2$
$P_{104}(x) = 6x^3 + 17x^2 + 11x + 2$

Polinomios de grado 4

$P_{105}(x) = 9x^4 - 9x^3 - 22x^2 + 4x + 8$
$P_{106}(x) = 12x^4 + 16x^3 - x^2 - 7x - 2$
$P_{107}(x) = 6x^4 - 23x^3 + 19x^2 + 8x - 4$
$P_{108}(x) = 6x^4 + x^3 - 41x^2 - 44x - 12$
$P_{109}(x) = 24x^4 - 49x^3 - 113x^2 + 144x - 36$
$P_{110}(x) = 6x^4 - 13x^3 - 18x^2 + 52x - 24$
$P_{111}(x) = 18x^4 + 21x^3 - 46x^2 - 35x - 6$
$P_{112}(x) = 9x^4 - 60x^3 + 118x^2 - 60x + 9$

Polinomios de grado 5

$P_{113}(x) = 36x^5 - 27x^4 - 100x^3 - 5x^2 + 44x + 12$
$P_{114}(x) = 45x^5 + 3x^4 - 133x^3 + 89x^2 + 8x - 12$
$P_{115}(x) = 48x^5 + 166x^4 + 83x^3 - 121x^2 - 8x + 12$
$P_{116}(x) = 36x^5 - 123x^4 + 16x^3 + 106x^2 - 60x + 9$

$$P_{117}(x) = 3x^5 - 2x^4 - 31x^3 + 2x^2 + 76x + 24$$
$$P_{118}(x) = 15x^5 - 29x^4 - 43x^3 + 113x^2 - 68x + 12$$
$$P_{119}(x) = 9x^5 + 9x^4 - 40x^3 - 40x^2 + 16x + 16$$
$$P_{120}(x) = 12x^5 - 53x^4 + 57x^3 + 30x^2 - 68x + 24$$

2. Con polinomios irreducibles de grado 2

2.1. Hasta 0 raices fraccionarias

Polinomios de grado 2

$$P_{121}(x) = -2x^2 - 8x - 8$$
$$P_{122}(x) = x^2 - 1$$
$$P_{123}(x) = -x^2 + 5x - 6$$
$$P_{124}(x) = -x^2 + x + 2$$
$$P_{125}(x) = -2x^2 + 8x - 6$$
$$P_{126}(x) = -2x^2 + 2x + 4$$
$$P_{127}(x) = x^2 - 2x - 3$$
$$P_{128}(x) = x^2 - 3x + 2$$

Polinomios de grado 3

$$P_{129}(x) = x^3 - x^2 + x - 1$$
$$P_{130}(x) = x^3 + x^2 + 4x + 4$$
$$P_{131}(x) = x^3 + 2x^2 + 2x + 4$$
$$P_{132}(x) = 2x^3 + 4x^2 + 6x + 12$$
$$P_{133}(x) = 2x^3 - 6x^2 + 8x - 24$$
$$P_{134}(x) = 2x^3 - 2x^2 + 6x - 6$$
$$P_{135}(x) = x^3 + 2x^2 + 2x + 4$$
$$P_{136}(x) = -x^3 + 2x^2 - x + 2$$

Polinomios de grado 4

$$P_{137}(x) = -2x^4 + 6x^3 - 10x^2 + 18x - 12$$
$$P_{138}(x) = x^4 + 3x^3 + 3x^2 + 3x + 2$$
$$P_{139}(x) = -x^4 + 2x^3 + x^2 + 4x + 6$$
$$P_{140}(x) = x^4 - 2x^3 + x^2 - 8x - 12$$
$$P_{141}(x) = -x^4 + 5x^3 - 9x^2 + 15x - 18$$
$$P_{142}(x) = x^4 - x^3 - 2x^2 - 4x - 24$$
$$P_{143}(x) = -x^4 - 3x^3 - 5x^2 - 9x - 6$$
$$P_{144}(x) = x^4 + x^3 + 2x - 4$$

Polinomios de grado 5

$$P_{145}(x) = x^5 - 5x^4 + 11x^3 - 19x^2 + 24x - 12$$
$$P_{146}(x) = x^5 + x^4 - 2x^3 - 2x^2 - 8x - 8$$
$$P_{147}(x) = -2x^5 + 6x^4 - 12x^3 + 20x^2 - 18x + 6$$
$$P_{148}(x) = x^5 - 8x^4 + 23x^3 - 34x^2 + 42x - 36$$
$$P_{149}(x) = x^5 - 2x^4 + x^3 - 2x^2 - 2x + 4$$
$$P_{150}(x) = 2x^5 - 2x^4 - 6x^3 + 6x^2 - 8x + 8$$
$$P_{151}(x) = x^5 + 2x^4 - x - 2$$
$$P_{152}(x) = x^5 + 6x^4 + 14x^3 + 20x^2 + 24x + 16$$

2.2. Hasta 1 raices fraccionarias

Polinomios de grado 2

$$P_{153}(x) = -2x^2 + 8$$
$$P_{154}(x) = x^2 - x - 6$$
$$P_{155}(x) = x^2 + 4x + 4$$
$$P_{156}(x) = 2x^2 - 3x + 1$$
$$P_{157}(x) = 2x^2 + 3x - 2$$
$$P_{158}(x) = x^2 - 4x + 3$$
$$P_{159}(x) = 3x^2 - 2x - 1$$
$$P_{160}(x) = 3x^2 + 2x - 1$$

Polinomios de grado 3

$$P_{161}(x) = 3x^3 - 2x^2 + 9x - 6$$
$$P_{162}(x) = 5x^3 - 3x^2 + 15x - 9$$
$$P_{163}(x) = 3x^3 - x^2 + 6x - 2$$
$$P_{164}(x) = 2x^3 - 6x^2 + 2x - 6$$
$$P_{165}(x) = 3x^3 - x^2 + 9x - 3$$
$$P_{166}(x) = 3x^3 - x^2 + 3x - 1$$
$$P_{167}(x) = 3x^3 + x^2 + 6x + 2$$
$$P_{168}(x) = 4x^3 - 3x^2 + 12x - 9$$

Polinomios de grado 4

$$P_{169}(x) = 3x^4 - 4x^3 + 7x^2 - 8x + 2$$
$$P_{170}(x) = x^4 - 16$$
$$P_{171}(x) = 3x^4 - 2x^3 + 11x^2 - 8x - 4$$
$$P_{172}(x) = 2x^4 + x^3 + x^2 + x - 1$$
$$P_{173}(x) = 3x^4 - 11x^3 + 12x^2 - 22x + 12$$

$P_{174}(x) = -2x^4 - 6x^3 - 12x^2 - 24x - 16$

$P_{175}(x) = 4x^4 - 11x^3 + 18x^2 - 33x + 18$

$P_{176}(x) = 2x^4 + 2x^3 + 4x - 8$

Polinomios de grado 5

$P_{177}(x) = -2x^5 + 10x^4 - 10x^3 + 2x^2 - 12x - 36$

$P_{178}(x) = 8x^5 + 21x^4 + 15x^3 + 15x^2 + 7x - 6$

$P_{179}(x) = x^5 - 3x^4 - 16x + 48$

$P_{180}(x) = 2x^5 - x^4 - 11x^3 - 7x^2 - 13x - 6$

$P_{181}(x) = 3x^5 - x^4 - 14x^3 - 14x^2 - 40x - 24$

$P_{182}(x) = 3x^5 - 5x^4 - 10x^3 + 2x^2 - 32x + 24$

$P_{183}(x) = x^5 + 5x^4 + 10x^3 + 14x^2 + 16x + 8$

$P_{184}(x) = 3x^5 + 2x^4 - 4x^3 + 4x^2 - 7x + 2$

2.3. Hasta 2 raices fraccionarias

Polinomios de grado 2

$P_{185}(x) = 6x^2 + 5x + 1$

$P_{186}(x) = 3x^2 - 8x + 4$

$P_{187}(x) = 3x^2 - 8x + 4$

$P_{188}(x) = 6x^2 - 7x + 2$

$P_{189}(x) = 6x^2 + 7x + 2$

$P_{190}(x) = 6x^2 + x - 2$

$P_{191}(x) = 3x^2 - 7x + 2$

$P_{192}(x) = 6x^2 - 5x + 1$

Polinomios de grado 3

$P_{193}(x) = 3x^3 - x^2 + 9x - 3$

$P_{194}(x) = 3x^3 + 2x^2 + 12x + 8$

$P_{195}(x) = 2x^3 - x^2 + 8x - 4$

$P_{196}(x) = x^3 + 2x^2 + x + 2$

$P_{197}(x) = 3x^3 + x^2 + 9x + 3$

$P_{198}(x) = -x^3 + 2x^2 - 2x + 4$

$P_{199}(x) = 2x^3 + x^2 + 4x + 2$

$P_{200}(x) = 2x^3 + 4x^2 + 8x + 16$

Polinomios de grado 4

$P_{201}(x) = 6x^4 - x^3 + 23x^2 - 4x - 4$

$P_{202}(x) = 3x^4 - 7x^3 + 6x^2 - 28x - 24$

$$P_{203}(x) = 16x^4 - 14x^3 + 35x^2 - 28x + 6$$
$$P_{204}(x) = 9x^4 - 3x^3 + 25x^2 - 9x - 6$$
$$P_{205}(x) = 2x^4 - 3x^3 + 4x^2 - 9x - 6$$
$$P_{206}(x) = 8x^4 - 10x^3 + 19x^2 - 20x + 6$$
$$P_{207}(x) = 9x^4 - 9x^3 + 38x^2 - 36x + 8$$
$$P_{208}(x) = 2x^4 - 3x^3 + 6x^2 - 12x - 8$$

Polinomios de grado 5

$$P_{209}(x) = 6x^5 - 5x^4 + 21x^3 - 18x^2 - 12x + 8$$
$$P_{210}(x) = 35x^5 - 141x^4 + 152x^3 - 168x^2 + 117x - 27$$
$$P_{211}(x) = 2x^5 - 3x^4 - 7x^3 - 22x + 12$$
$$P_{212}(x) = 49x^5 - 91x^4 + 198x^3 - 282x^2 + 153x - 27$$
$$P_{213}(x) = 9x^5 - 9x^4 + 17x^3 - 17x^2 - 2x + 2$$
$$P_{214}(x) = 6x^5 + 5x^4 + 4x^3 + 4x^2 - 2x - 1$$
$$P_{215}(x) = 6x^5 + 5x^4 + 16x^3 + 14x^2 - 6x - 3$$
$$P_{216}(x) = 3x^5 - 14x^4 + 25x^3 - 50x^2 + 52x + 24$$

2.4. Hasta 3 raices fraccionarias

Polinomios de grado 3

$$P_{217}(x) = 2x^3 + x^2 + 6x + 3$$
$$P_{218}(x) = 5x^3 - 3x^2 + 20x - 12$$
$$P_{219}(x) = 2x^3 - x^2 + 6x - 3$$
$$P_{220}(x) = x^3 - 2x^2 + 4x - 8$$
$$P_{221}(x) = 7x^3 - 3x^2 + 14x - 6$$
$$P_{222}(x) = 4x^3 - 3x^2 + 16x - 12$$
$$P_{223}(x) = 2x^3 - x^2 + 4x - 2$$
$$P_{224}(x) = 3x^3 + 2x^2 + 9x + 6$$

Polinomios de grado 4

$$P_{225}(x) = 14x^4 - 27x^3 + 51x^2 - 81x + 27$$
$$P_{226}(x) = 9x^4 + 17x^2 - 2$$
$$P_{227}(x) = 9x^4 + 6x^3 + 10x^2 + 6x + 1$$
$$P_{228}(x) = 4x^4 - 4x^3 + 13x^2 - 16x - 12$$
$$P_{229}(x) = -2x^4 + 8x^3 - 16x^2 + 32x - 32$$
$$P_{230}(x) = 9x^4 + 26x^2 - 3$$
$$P_{231}(x) = 9x^4 + 17x^2 - 2$$
$$P_{232}(x) = 9x^4 + 26x^2 - 3$$

Polinomios de grado 5

$P_{233}(x) = 18x^5 - 3x^4 + 29x^3 - 4x^2 - 14x + 4$

$P_{234}(x) = 18x^5 - 9x^4 + 70x^3 - 35x^2 - 8x + 4$

$P_{235}(x) = 32x^5 - 32x^4 + 90x^3 - 87x^2 - 18x + 27$

$P_{236}(x) = 21x^5 - 37x^4 + 5x^3 - 25x^2 - 16x + 12$

$P_{237}(x) = 18x^5 - 21x^4 + 5x^3 - 15x^2 - 13x + 6$

$P_{238}(x) = 2x^5 + x^4 - 4x^3 - 2x^2 - 16x - 8$

$P_{239}(x) = 27x^5 - 27x^4 + 54x^3 - 50x^2 + 8$

$P_{240}(x) = 9x^5 + 30x^4 + 37x^3 + 38x^2 + 28x + 8$