1. Sin polinomios irreducibles de grado 2

1.1. Hasta 2 raices fraccionarias

$$P_1(x) = 3x^3 + 11x^2 + 12x + 4$$
$$P_2(x) = 10x^3 - 41x^2 + 36x - 9$$
$$P_3(x) = 8x^3 - 35x^2 + 44x - 12$$
$$P_4(x) = 5x^3 - 18x^2 + 19x - 6$$
$$P_5(x) = 14x^3 - 55x^2 + 42x - 9$$
$$P_6(x) = 6x^3 + 7x^2 - 1$$
$$P_7(x) = 9x^4 - 45x^3 + 29x^2 + 69x + 18$$
$$P_8(x) = 9x^4 - 39x^3 + 46x^2 - 4x - 8$$
$$P_9(x) = 9x^4 + 3x^3 - 26x^2 - 28x - 8$$
$$P_{10}(x) = 8x^4 - 10x^3 - 5x^2 + 10x - 3$$
$$P_{11}(x) = 4x^4 - 7x^3 - 13x^2 + 28x - 12$$
$$P_{12}(x) = 7x^4 + 11x^3 - 34x^2 - 44x + 24$$
$$P_{13}(x) = 9x^5 + 12x^4 - 8x^3 - 14x^2 - x + 2$$
$$P_{14}(x) = 2x^5 + 2x^4 - 24x^3 - 32x^2 + 64x + 96$$
$$P_{15}(x) = 2x^5 - 4x^4 - 16x^3 + 32x^2 + 32x - 64$$
$$P_{16}(x) = 2x^5 - 9x^4 - x^3 + 42x^2 - 28x - 24$$
$$P_{17}(x) = 6x^5 - 29x^4 + 36x^3 - 6x^2 - 10x + 3$$
$$P_{18}(x) = -2x^5 - 4x^4 + 18x^3 + 44x^2 - 8x - 48$$

1.2. Hasta 3 raices fraccionarias

$$P_{19}(x) = 27x^3 + 45x^2 + 24x + 4$$
$$P_{20}(x) = 96x^3 - 44x^2 - 45x + 18$$
$$P_{21}(x) = 30x^3 - 13x^2 - 8x + 3$$
$$P_{22}(x) = 4x^3 + 4x^2 - 11x - 6$$
$$P_{23}(x) = 18x^3 + 9x^2 - 2x - 1$$
$$P_{24}(x) = 9x^3 + 21x^2 + 4x - 4$$
$$P_{25}(x) = 18x^4 - 69x^3 + 86x^2 - 44x + 8$$
$$P_{26}(x) = 6x^4 - x^3 - 26x^2 + 4x + 8$$
$$P_{27}(x) = 27x^4 - 72x^3 - 39x^2 + 32x + 12$$
$$P_{28}(x) = 6x^4 + 23x^3 + 28x^2 + 13x + 2$$
$$P_{29}(x) = 9x^4 - 9x^3 - 55x^2 + x + 6$$
$$P_{30}(x) = 4x^4 - 11x^2 - 9x - 2$$
$$P_{31}(x) = 6x^5 + 13x^4 - 24x^3 - 56x^2 + 16$$
$$P_{32}(x) = 21x^5 - 16x^4 - 116x^3 - 82x^2 + 15x + 18$$
$$P_{33}(x) = 21x^5 - 2x^4 - 66x^3 + 48x^2 + 5x - 6$$
$$P_{34}(x) = 3x^5 - 2x^4 - 24x^3 + 16x^2 + 48x - 32$$
$$P_{35}(x) = 6x^5 + 19x^4 + 10x^3 - 15x^2 - 16x - 4$$
$$P_{36}(x) = 10x^5 + 19x^4 - 30x^3 - 31x^2 + 44x - 12$$

1.3. Hasta 4 raices fraccionarias

$$P_{37}(x) = 6x^3 - 17x^2 + 4x + 12$$
$$P_{38}(x) = 12x^3 - 8x^2 - 13x - 3$$
$$P_{39}(x) = 9x^3 - 18x^2 - x + 2$$
$$P_{40}(x) = 14x^3 - 27x^2 - 5x + 6$$
$$P_{41}(x) = 6x^3 + 5x^2 - 12x + 4$$
$$P_{42}(x) = 8x^3 - 3x^2 - 32x + 12$$
$$P_{43}(x) = 12x^4 - 32x^3 + 31x^2 - 13x + 2$$
$$P_{44}(x) = 27x^4 + 9x^3 - 66x^2 + 44x - 8$$
$$P_{45}(x) = 12x^4 - 8x^3 - 7x^2 + 2x + 1$$
$$P_{46}(x) = 9x^4 + 24x^3 - 8x^2 - 32x + 16$$
$$P_{47}(x) = 9x^4 + 15x^3 - 14x^2 - 12x + 8$$
$$P_{48}(x) = 21x^4 - 44x^3 - 97x^2 + 132x - 36$$
$$P_{49}(x) = x^5 + x^4 - 9x^3 - 13x^2 + 8x + 12$$
$$P_{50}(x) = 3x^5 - 10x^4 - 11x^3 + 46x^2 - 4x - 24$$
$$P_{51}(x) = 4x^5 - 20x^4 + 11x^3 + 41x^2 - 3x - 9$$
$$P_{52}(x) = 18x^5 + 21x^4 - 64x^3 - 83x^2 - 32x - 4$$
$$P_{53}(x) = 6x^5 - 5x^4 - 41x^3 - x^2 + 23x - 6$$
$$P_{54}(x) = 24x^5 - 185x^4 + 442x^3 - 237x^2 - 252x + 108$$

1.4. Hasta 5 raices fraccionarias

$$P_{55}(x) = 12x^3 - 20x^2 - x + 6$$
$$P_{56}(x) = 4x^3 - 8x^2 - x + 2$$
$$P_{57}(x) = 18x^3 - 9x^2 - 2x + 1$$
$$P_{58}(x) = 18x^3 + 9x^2 - 8x - 4$$
$$P_{59}(x) = 12x^3 + 16x^2 + 7x + 1$$
$$P_{60}(x) = 24x^3 - 97x^2 + 81x - 18$$
$$P_{61}(x) = 12x^4 - 29x^3 - 49x^2 + 96x - 36$$
$$P_{62}(x) = 27x^4 - 36x^3 + 6x^2 + 4x - 1$$
$$P_{63}(x) = 3x^4 - 7x^3 - 18x^2 + 28x + 24$$
$$P_{64}(x) = 6x^4 - x^3 - 26x^2 + 4x + 8$$
$$P_{65}(x) = 3x^4 + 2x^3 - 13x^2 - 8x + 4$$
$$P_{66}(x) = 4x^4 - 16x^3 + 5x^2 + 19x + 6$$
$$P_{67}(x) = 24x^5 - x^4 - 75x^3 + 51x^2 + 7x - 6$$
$$P_{68}(x) = 18x^5 - 45x^4 - 68x^3 + 147x^2 - 76x + 12$$
$$P_{69}(x) = 18x^5 - 3x^4 - 22x^3 + 4x^2 + 4x - 1$$
$$P_{70}(x) = 3x^5 - 19x^4 + 21x^3 + 67x^2 - 132x + 36$$
$$P_{71}(x) = 27x^5 - 99x^4 + 42x^3 + 38x^2 - 5x - 3$$
$$P_{72}(x) = 6x^5 - 41x^4 + 82x^3 - 32x^2 - 24x + 9$$

2. Con 1 polinomio/s irreducible/s de grado 2

2.1. Hasta 2 raices fraccionarias

$$P_{73}(x) = x^3 + 2x^2 + x + 2$$
$$P_{74}(x) = 3x^3 - 2x^2 + 9x - 6$$
$$P_{75}(x) = 2x^3 + x^2 - 8x - 4$$
$$P_{76}(x) = 3x^3 - x^2 + 12x - 4$$

$$P_{77}(x) = 8x^3 - 3x^2 + 24x - 9$$

$$P_{78}(x) = 3x^3 + 2x^2 - 12x - 8$$

$$P_{79}(x) = 3x^4 - 5x^3 - 14x^2 + 20x + 8$$

$$P_{80}(x) = x^4 + 4x^3 + 3x^2 - 4x - 4$$

$$P_{81}(x) = 15x^4 - 19x^3 + 66x^2 - 76x + 24$$

$$P_{82}(x) = 3x^4 - 8x^3 + 16x^2 - 32x + 16$$

$$P_{83}(x) = 9x^4 - 12x^3 - 32x^2 + 48x - 16$$

$$P_{84}(x) = 9x^4 - 9x^3 - 7x^2 + 9x - 2$$

$$P_{85}(x) = -2x^5 - 2x^4 + 12x^3 + 12x^2 - 16x - 16$$

$$P_{86}(x) = 9x^5 + 9x^4 + 14x^3 + 14x^2 - 8x - 8$$

$$P_{87}(x) = 6x^5 + 13x^4 - 9x^3 - 37x^2 - 27x - 6$$

$$P_{88}(x) = 2x^5 - 5x^4 - x^3 + 7x^2 - x - 2$$

$$P_{89}(x) = 2x^5 + 9x^4 + 16x^3 + 22x^2 + 24x + 8$$

$$P_{90}(x) = 12x^5 + 7x^4 + 20x^3 + 40x^2 - 112x + 48$$

2.2. Hasta 3 raices fraccionarias

$$P_{91}(x) = 8x^3 - 3x^2 - 32x + 12$$

$$P_{92}(x) = 3x^3 - 2x^2 + 12x - 8$$

$$P_{93}(x) = 3x^3 + x^2 - 12x - 4$$

$$P_{94}(x) = 3x^3 - 2x^2 - 6x + 4$$

$$P_{95}(x) = 3x^3 + x^2 - 9x - 3$$

$$P_{96}(x) = 3x^3 + x^2 - 3x - 1$$

$$P_{97}(x) = 3x^4 - 10x^3 - 9x^2 + 40x - 12$$

$$P_{98}(x) = 12x^4 - 17x^3 + 18x^2 - 17x + 6$$

$$P_{99}(x) = 6x^4 + x^3 - 14x^2 - 2x + 4$$

$$P_{100}(x) = 9x^4 - 12x^3 - 23x^2 + 36x - 12$$

$$P_{101}(x) = 9x^4 + 3x^3 - 20x^2 - 6x + 4$$

$$P_{102}(x) = 8x^4 - 10x^3 + 35x^2 - 40x + 12$$

$$P_{103}(x) = 9x^5 - 24x^4 - 38x^3 + 78x^2 + 33x - 18$$

$$P_{104}(x) = 48x^5 + 22x^4 + 41x^3 + 19x^2 - 7x - 3$$

$$P_{105}(x) = 18x^5 - 9x^4 - 77x^3 + 38x^2 + 20x - 8$$

$$P_{106}(x) = 27x^5 - 117x^3 + 2x^2 + 36x - 8$$

$$P_{107}(x) = 18x^5 - 15x^4 - 73x^3 + 62x^2 + 4x - 8$$

$$P_{108}(x) = 12x^5 - 41x^4 + 4x^3 + 111x^2 - 120x + 36$$

2.3. Hasta 4 raices fraccionarias

$$P_{109}(x) = x^3 - 2x^2 - 2x + 4$$

$$P_{110}(x) = 2x^3 + x^2 - 6x - 3$$

$$P_{111}(x) = 2x^3 - x^2 - 6x + 3$$

$$P_{112}(x) = 3x^3 - 2x^2 - 3x + 2$$

$$P_{113}(x) = -x^3 + 2x^2 + 3x - 6$$

$$P_{114}(x) = 2x^3 - x^2 + 6x - 3$$

$$P_{115}(x) = 3x^4 - 5x^3 - 11x^2 + 15x + 6$$

$$P_{116}(x) = 9x^4 - 9x^3 + 20x^2 - 18x + 4$$

$$P_{117}(x) = 6x^4 - 11x^3 - 15x^2 + 33x - 9$$

$$P_{118}(x) = 2x^4 - 6x^2 - 8$$

$$P_{119}(x) = 24x^4 - 17x^3 + 51x^2 - 34x + 6$$

$$P_{120}(x) = 9x^4 + 12x^3 - 5x^2 - 12x - 4$$

$$P_{121}(x) = 6x^5 + 7x^4 - 21x^3 - 12x^2 + 18x - 4$$

$$P_{122}(x) = 27x^5 + 27x^4 - 72x^3 - 80x^2 - 27x - 3$$

$$P_{123}(x) = 28x^5 - 68x^4 + 17x^3 + 59x^2 - 45x + 9$$

$$P_{124}(x) = 10x^5 - 31x^4 - 5x^3 + 87x^2 - 75x + 18$$

$$P_{125}(x) = 9x^5 - 18x^4 - 40x^3 + 80x^2 + 16x - 32$$

$$P_{126}(x) = 6x^5 + 11x^4 - 9x^3 - 13x^2 + 3x + 2$$

2.4. Hasta 5 raices fraccionarias

$$P_{127}(x) = 2x^3 - x^2 + 2x - 1$$

$$P_{128}(x) = 7x^3 - 3x^2 - 7x + 3$$

$$P_{129}(x) = 2x^3 - x^2 + 8x - 4$$

$$P_{130}(x) = 3x^3 - 2x^2 - 3x + 2$$

$$P_{131}(x) = 3x^3 + 2x^2 - 6x - 4$$

$$P_{132}(x) = 3x^3 + 2x^2 + 3x + 2$$

$$P_{133}(x) = 4x^4 - 17x^2 + 4$$

$$P_{134}(x) = x^4 - 7x^2 + 12$$

$$P_{135}(x) = x^4 - x^3 - 10x^2 + 4x + 24$$

$$P_{136}(x) = 3x^4 + 8x^3 - 8x^2 - 32x - 16$$

$$P_{137}(x) = 6x^4 + x^3 + 4x^2 + x - 2$$

$$P_{138}(x) = 2x^4 - 7x^3 - 5x^2 + 28x - 12$$

$$P_{139}(x) = 27x^5 - 9x^4 - 57x^3 + 19x^2 + 6x - 2$$

$$P_{140}(x) = 75x^5 - 115x^4 + 207x^3 - 239x^2 + 114x - 18$$

$$P_{141}(x) = 15x^5 - 59x^4 - 15x^3 + 227x^2 - 180x + 36$$

$$P_{142}(x) = 27x^5 - 9x^4 - 57x^3 + 19x^2 + 6x - 2$$

$$P_{143}(x) = 9x^5 + 12x^4 - 20x^3 - 10x^2 + 11x - 2$$

$$P_{144}(x) = 18x^5 - 21x^4 + 41x^3 - 57x^2 - 39x + 18$$

3. Soluciones

$P_1(x)$
$= (3x+2)(x+2)(x+1)$

$P_2(x)$
$= (5x-3)(2x-1)(x-3)$

$P_3(x) = (8x-3)(x-2)^2$

$P_4(x)$
$= (5x-3)(x-1)(x-2)$

$P_5(x)$
$= (7x-3)(2x-1)(x-3)$

$P_6(x)$
$= (3x-1)(2x+1)(x+1)$

$P_7(x)$
$= (3x+2)(3x+1)(x-3)^2$

$P_8(x)$
$= (3x+1)(3x-2)(x-2)^2$

$P_9(x)$
$= (3x+2)^2(x+1)(x-2)$

$P_{10}(x)$
$= (4x-3)(2x-1)(x+1)(x-1)$

$P_{11}(x)$
$= (4x-3)(x+2)(x-1)(x-2)$

$P_{12}(x)$
$= (7x-3)(x+2)^2(x-2)$

$P_{13}(x)$
$= (3x+2)(3x-1)(x+1)^2(x-1)$

$P_{14}(x)$
$= 2(x+2)^3(x-2)(x-3)$

$P_{15}(x) = 2(x+2)^2(x-2)^3$

$P_{16}(x)$
$= (2x+1)(x+2)(x-2)^2(x-3)$

$P_{17}(x)$
$= (3x-1)(2x+1)(x-1)^2(x-3)$

$P_{18}(x)$
$= -2(x+2)^3(x-1)(x-3)$

$P_{19}(x) = (3x+2)^2(3x+1)$

$P_{20}(x)$
$= (8x-3)(4x-3)(3x+2)$

$P_{21}(x)$
$= (5x-3)(3x-1)(2x+1)$

$P_{22}(x)$
$= (2x+1)(2x-3)(x+2)$

$P_{23}(x)$
$= (3x+1)(3x-1)(2x+1)$

$P_{24}(x)$
$= (3x+2)(3x-1)(x+2)$

$P_{25}(x)$
$= (3x-2)^2(2x-1)(x-2)$

$P_{26}(x)$
$= (3x-2)(2x+1)(x+2)(x-2)$

$P_{27}(x)$
$= (3x+2)(3x+1)(3x-2)(x-3)$

$P_{28}(x)$
$= (3x+1)(2x+1)(x+2)(x+1)$

$P_{29}(x)$
$= (3x+1)(3x-1)(x+2)(x-3)$

$P_{30}(x)$
$= (2x+1)^2(x+1)(x-2)$

$P_{31}(x)$
$= (3x+2)(2x-1)(x+2)^2(x-2)$

$P_{32}(x)$
$= (7x-3)(3x+2)(x+1)^2(x-3)$

$P_{33}(x)$
$= (7x-3)(3x+1)(x+2)(x-1)^2$

$P_{34}(x)$
$= (3x-2)(x+2)^2(x-2)^2$

$P_{35}(x)$
$= (3x+2)(2x+1)(x+2)(x+1)(x-1)$

$P_{36}(x)$
$= (5x-3)(2x-1)(x+2)^2(x-1)$

$P_{37}(x)$
$= (3x+2)(2x-3)(x-2)$

$P_{38}(x)$
$= (3x+1)(2x+1)(2x-3)$

$P_{39}(x)$
$= (3x+1)(3x-1)(x-2)$

$P_{40}(x)$
$= (7x-3)(2x+1)(x-2)$

$P_{41}(x)$
$= (3x-2)(2x-1)(x+2)$

$P_{42}(x)$
$= (8x-3)(x+2)(x-2)$

$P_{43}(x)$
$= (3x-2)(2x-1)^2(x-1)$

$P_{44}(x)$
$= (3x-1)(3x-2)^2(x+2)$

$P_{45}(x)$
$= (3x+1)(2x+1)(2x-1)(x-1)$

$P_{46}(x) = (3x-2)^2(x+2)^2$

$P_{47}(x)$
$= (3x-2)^2(x+2)(x+1)$

$P_{48}(x)$
$= (7x-3)(3x-2)(x+2)(x-3)$

$P_{49}(x)$
$= (x+2)^2(x+1)(x-1)(x-3)$

$P_{50}(x)$
$= (3x+2)(x+2)(x-1)(x-2)(x-3)$

$P_{51}(x)$
$= (2x+1)(2x-1)(x+1)(x-3)^2$

$P_{52}(x)$
$= (3x+1)^2(2x+1)(x+2)(x-2)$

$P_{53}(x)$
$= (3x-1)(2x-1)(x+2)(x+1)(x-3)$

$P_{54}(x)$
$= (8x-3)(3x+2)(x-2)(x-3)^2$

$P_{55}(x)$
$= (3x-2)(2x+1)(2x-3)$

$P_{56}(x)$
$= (2x+1)(2x-1)(x-2)$

$P_{57}(x)$
$= (3x+1)(3x-1)(2x-1)$

$P_{58}(x)$
$= (3x+2)(3x-2)(2x+1)$

$P_{59}(x) = (3x+1)(2x+1)^2$

$P_{60}(x)$
$= (8x-3)(3x-2)(x-3)$

$P_{61}(x)$
$= (4x-3)(3x-2)(x+2)(x-3)$

$P_{62}(x)$
$= (3x+1)(3x-1)^2(x-1)$

$P_{63}(x)$
$= (3x+2)(x+2)(x-2)(x-3)$

$P_{64}(x)$
$= (3x-2)(2x+1)(x+2)(x-2)$

$P_{65}(x)$
$= (3x-1)(x+2)(x+1)(x-2)$

$P_{66}(x)$
$= (2x+1)^2(x-2)(x-3)$

$P_{67}(x)$
$= (8x-3)(3x+1)(x+2)(x-1)^2$

$P_{68}(x)$
$= (3x-1)(3x-2)(2x-1)(x+2)(x-3)$

$P_{69}(x)$
$= (3x-1)^2(2x+1)(x+1)(x-1)$

$P_{70}(x)$
$= (3x-1)(x+2)(x-2)(x-3)^2$

$P_{71}(x)$
$= (3x+1)^2(3x-1)(x-1)(x-3)$

$P_{72}(x)$
$= (3x-1)(2x+1)(x-1)(x-3)^2$

$P_{73}(x) = \left(x^2+1\right)(x+2)$

$P_{74}(x) = \left(x^2+3\right)(3x-2)$

$P_{75}(x)$
$= (2x+1)(x+2)(x-2)$

$P_{76}(x) = \left(x^2+4\right)(3x-1)$

$P_{77}(x) = \left(x^2+3\right)(8x-3)$

$P_{78}(x)$
$= (3x+2)(x+2)(x-2)$

$P_{79}(x)$
$= (3x+1)(x+2)(x-2)^2$

$P_{80}(x)$
$= (x+2)^2(x+1)(x-1)$

$P_{81}(x)$
$= \left(x^2+4\right)(5x-3)(3x-2)$

$P_{82}(x)$
$= \left(x^2+4\right)(3x-2)(x-2)$

$P_{83}(x)$
$= (3x-2)^2(x+2)(x-2)$

$P_{84}(x)$
$= (3x-1)(3x-2)(x+1)(x-1)$

$P_{85}(x)$
$= -2\left(x^2-2\right)(x+2)(x+1)(x-2)$

$P_{86}(x)$
$= \left(x^2+2\right)(3x+2)(3x-2)(x+1)$

$P_{87}(x)$
$= \left(x^2-3\right)(3x+2)(2x+1)(x+1)$

$P_{88}(x)$
$= (2x+1)(x+1)(x-1)^2(x-2)$

$P_{89}(x)$
$= \left(x^2+2\right)(2x+1)(x+2)^2$

$P_{90}(x)$
$= \left(x^2+4\right)(4x-3)(3x-2)(x+2)$

$P_{91}(x)$
$= (8x-3)(x+2)(x-2)$

$P_{92}(x) = \left(x^2+4\right)(3x-2)$

$P_{93}(x)$
$= (3x+1)(x+2)(x-2)$

$P_{94}(x) = \left(x^2-2\right)(3x-2)$

$P_{95}(x) = \left(x^2-3\right)(3x+1)$

$P_{96}(x)$
$= (3x+1)(x+1)(x-1)$

$P_{97}(x)$
$= (3x-1)(x+2)(x-2)(x-3)$

$P_{98}(x)$
$= \left(x^2+1\right)(4x-3)(3x-2)$

$P_{99}(x)$
$= \left(x^2-2\right)(3x+2)(2x-1)$

$P_{100}(x) = \left(x^2-3\right)(3x-2)^2$

$P_{101}(x)$
$= \left(x^2-2\right)(3x+2)(3x-1)$

$P_{102}(x)$
$= \left(x^2+4\right)(4x-3)(2x-1)$

$P_{103}(x)$
$= \left(x^2-3\right)(3x+2)(3x-1)(x-3)$

$P_{104}(x)$
$= \left(x^2+1\right)(8x-3)(3x+1)(2x+1)$

$P_{105}(x)$
$= (3x-1)(3x-2)(2x+1)(x+2)(x-2)$

$P_{106}(x)$
$= (3x+2)(3x-1)^2(x+2)(x-2)$

$P_{107}(x)$
$= (3x+1)(3x-2)(2x-1)(x+2)(x-2)$

$P_{108}(x)$
$= \left(x^2-3\right)(4x-3)(3x-2)(x-2)$

$P_{109}(x) = \left(x^2-2\right)(x-2)$

$P_{110}(x) = \left(x^2-3\right)(2x+1)$

$P_{111}(x) = \left(x^2-3\right)(2x-1)$

$P_{112}(x)$
$= (3x-2)(x+1)(x-1)$

$P_{113}(x) = -\left(x^2-3\right)(x-2)$

$P_{114}(x) = \left(x^2+3\right)(2x-1)$

$P_{115}(x)$
$= \left(x^2-3\right)(3x+1)(x-2)$

$P_{116}(x)$
$= \left(x^2+2\right)(3x-1)(3x-2)$

$P_{117}(x)$
$= \left(x^2-3\right)(3x-1)(2x-3)$

$P_{118}(x)$
$= 2\left(x^2+1\right)(x+2)(x-2)$

$P_{119}(x)$
$= \left(x^2+2\right)(8x-3)(3x-1)$

$P_{120}(x)$
$= (3x+2)^2(x+1)(x-1)$

$P_{121}(x)$
$= \left(x^2-2\right)(3x-1)(2x-1)(x+2)$

$P_{122}(x) = \left(x^2-3\right)(3x+1)^3$

$P_{123}(x)$
$= (7x-3)(2x-1)(2x-3)(x+1)(x-1)$

$P_{124}(x)$
$= \left(x^2-3\right)(5x-3)(2x-1)(x-2)$

$P_{125}(x)$
$= (3x+2)(3x-2)(x+2)(x-2)^2$

$P_{126}(x)$
$= (3x+1)(2x-1)(x+2)(x+1)(x-1)$

$P_{127}(x) = \left(x^2+1\right)(2x-1)$

$P_{128}(x)$
$= (7x-3)(x+1)(x-1)$

$P_{129}(x) = \left(x^2+4\right)(2x-1)$

$P_{130}(x)$
$= (3x-2)(x+1)(x-1)$

$P_{131}(x) = \left(x^2-2\right)(3x+2)$

$P_{132}(x) = \left(x^2+1\right)(3x+2)$

$P_{133}(x)$
$= (2x+1)(2x-1)(x+2)(x-2)$

$P_{134}(x)$
$= \left(x^2-3\right)(x+2)(x-2)$

$P_{135}(x)$
$= (x+2)^2(x-2)(x-3)$

$P_{136}(x)$
$= (3x+2)(x+2)^2(x-2)$

$P_{137}(x)$
$= \left(x^2+1\right)(3x+2)(2x-1)$

$P_{138}(x)$
$= (2x-1)(x+2)(x-2)(x-3)$

$P_{139}(x)$
$= \left(x^2-2\right)(3x+1)(3x-1)^2$

$P_{140}(x)$
$= \left(x^2+2\right)(5x-3)^2(3x-1)$

$P_{141}(x)$
$= (5x-3)(3x-1)(x+2)(x-2)(x-3)$

$P_{142}(x)$
$= \left(x^2-2\right)(3x+1)(3x-1)^2$

$P_{143}(x)$
$= (3x-1)^2(x+2)(x+1)(x-1)$

$P_{144}(x)$
$= \left(x^2+3\right)(3x+2)(3x-1)(2x-3)$