최고난도 인수분해 1680제

I

문제

1. 사차식의 인수분해

1.1 일계수 사차식

$x^4-3x^3-2x^2-19x+15$

$x^4-5x^3+8x^2-2x-8$

$x^4+5x^3+x^2-14x+4$

$x^4-x^3+2x^2+2x-8$

$x^4-2x^3-5x^2-14x-15$

$x^4+2x^3-11x^2-18x-4$

$x^4+5x^3+3x^2-10x-6$

$x^4-6x^3+9x^2-12x-20$

$x^4-4x^3+5x^2-20x+25$

$x^4-5x^3+9x^2-14x+6$

$x^4-4x^3-6x^2+17x-6$

$x^4-9x^3+15x^2+24x+4$

$x^4+3x^3+2x^2+15x-15$

$x^4-2x^3-13x^2-26x-8$

$x^4-7x^2-18x-8$

$x^4+4x^3-2x^2+9x+2$

$x^4-3x^3-2x^2-5x+15$

$x^4-2x^3-20x^2+x+6$

$x^4+5x^3+7x^2+6x+2$

$x^4+2x^3-x^2-10x-20$

$x^4+2x^3-11x^2-6x+2$

$x^4-x^3-23x^2-21x-4$

$x^4-x^3-3x^2-13x-20$

x^4-x^3-7x-3

$x^4-5x^3+6x^2-3x-9$

$x^4+x^3-x^2+3x-12$

$x^4-x^3-20x^2+11x+15$

$x^4-9x^3+28x^2-37x+15$

$x^4-3x^3-7x^2+20x-10$

$x^4+9x^3+22x^2+5x-15$

$x^4+x^3-7x^2+22x-20$

$x^4+4x^3+3x^2+10x+15$

$x^4+8x^3+11x^2-14x+3$

$x^4-4x^3+3x^2-10x-25$

$x^4-2x^3+x^2-25$

$x^4+4x^3-9x^2-20x+20$

$x^4+2x^3-7x^2-8x+15$

$x^4-3x^3+2x^2-9x-3$

$x^4-4x^3-4x^2+7x-2$

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

$x^4-2x^3+x^2+6x-12$

$x^4+3x^3-x^2+17x-4$

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

$x^4+4x^3+x^2+12x-6$

$x^4+7x^3+9x^2+7x-12$

$x^4+9x^3+22x^2+7x-3$

$x^4+x^3+13x+5$

$x^4+5x^3+15x-9$

$x^4-4x^3-8x^2+21x-4$

$x^4-4x^3-7x^2+4x+1$

$x^4-8x^3+22x^2-24x+5$

$x^4-8x^3+14x^2+x-2$

$x^4-4x^3+4x^2+5x-12$

$x^4-3x^3+2x^2-x-1$

$x^4+9x^3+14x^2-27x+9$

$x^4-9x^3+18x^2+9x+1$

$x^4-2x^3+6x^2-4x+8$

$x^4+2x^3-3x^2-16x-16$

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

$x^4+x^3-21x^2-14x-2$

$x^4+10x^3+18x^2-35x+12$

$x^4+7x^3+11x^2-5x-2$

$x^4-8x^3+15x^2+4x-4$

$x^4-29x^2+30x-5$

$x^4-6x^3-3x^2+20x+15$

$x^4+5x^3+4x^2-3x-1$

$x^4+5x^3+13x^2+17x+12$

$x^4-2x^2-3x+12$

$x^4+9x^3+17x^2-16x-4$

$x^4-3x^3-5x^2+9x+6$

$x^4+4x^3-3x^2-14x+10$

$x^4+4x^3-20x-25$

$x^4+5x^3+4x^2+3x-1$

$x^4-6x^3+11x^2-14x-4$

$x^4-3x^3-8x^2+15x+15$

$x^4-4x^3+x^2-16x-12$

$x^4+2x^3-19x^2-28x-5$

$x^4-5x^3-6x^2+15x+9$

$x^4-3x^3-4x^2+5x-1$

$x^4+4x^3+4x^2+20x-5$

$x^4+2x^3-15x^2-16x+10$

$x^4+4x^3-12x^2-11x+12$

$x^4-5x^3+2x^2-4x-8$

$x^4-3x^3+x^2+6x-20$

$x^4+3x^3-13x^2+20x-10$

$x^4-5x^3+7x^2-9x+2$

$x^4+2x^3-14x^2+29x-12$

$x^4+6x^3+4x^2-17x-12$

$x^4-7x^3+15x^2-7x-10$

$x^4+5x^3-4x^2-25x+25$

$x^4-2x^3-3x^2-4x-10$

$x^4-3x^3+7x-15$

$x^4-10x^3+23x^2+10x+1$

x^4-7x^2+9

$x^4-2x^3-12x^2-2x+3$

$x^4-x^3-7x^2+23x-20$

$x^4-x^3-17x^2+30x-10$

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

$x^4-9x^3+22x^2-9x+1$

$x^4-2x^3-22x^2-5x+10$

$x^4-10x^3+24x^2+5x-6$

$x^4-4x^3+13x^2-20x+25$

$x^4 - x^3 - 26x^2 + 3x + 9$
$x^4 + 3x^3 + 6x^2 + 6x + 8$
$x^4 + x^3 - 12x^2 + 21x - 9$
$x^4 + 5x^3 + 7x^2 + 15x - 4$
$x^4 - x^3 + 3x^2 - 2x + 2$
$x^4 - x^2 + 14x - 10$
$x^4 - 5x^3 + 4x^2 - 9x - 9$
$x^4 - 3x^3 - 15x^2 - 3x + 4$
$x^4 - 5x^3 + 7x^2 - 15x - 4$
$x^4 - 6x^3 + 5x^2 + 12x - 9$
$x^4 + 8x^3 + 21x^2 + 28x + 5$
$x^4 - x^3 - 2x^2 - 17x - 5$
$x^4 - 6x^3 + 9x^2 - 16x + 3$
$x^4 - 6x^3 + 11x^2 - 18x + 9$
$x^4 + 3x^3 + 2x^2 - 3x - 9$
$x^4 + 6x^3 + 2x^2 - 23x - 10$
$x^4 - x^3 + x^2 - 4x - 12$
$x^4 - 5x^2 - 18x - 20$
$x^4 + 3x^2 - 6x - 5$
$x^4 - 4x^3 - 4x^2 - 17x - 6$
$x^4 - 8x^3 + 8x^2 + 27x + 12$
$x^4 - 6x^3 + 2x^2 + 19x - 4$
$x^4 + 4x^3 - 4x^2 + 17x - 6$
$x^4 - 6x^3 - 2x^2 + 19x + 12$
$x^4 + 7x^3 + 18x^2 + 25x + 15$
$x^4 + 4x^3 + 2x^2 - 12x - 15$

$x^4 - 26x^2 - 15x - 2$
$x^4 + 5x^3 + 8x^2 + x - 5$
$x^4 - 5x^3 + 8x^2 - 3x - 3$
$x^4 - 3x^3 + 2x^2 + 9x - 15$
$x^4 + 4x^3 - x^2 - 2x - 5$
$x^4 + 7x^3 + 9x^2 + 10x - 20$
$x^4 - 13x^2 - 4x + 2$
$x^4 - 4x^3 - 4x^2 + 17x + 10$
$x^4 + 2x^3 - 16x^2 + 27x - 12$
$x^4 + 6x^3 + 11x^2 + 6x + 1$
$x^4 + 9x^3 + 26x^2 + 29x + 5$
$x^4 + 5x^3 - 4x^2 + 5x - 5$
$x^4 - 5x^3 + 13x^2 - 18x + 12$
$x^4 + x^3 - 13x^2 + 10x - 2$
$x^4 - 7x^3 + 13x^2 - 12x + 2$
$x^4 + 7x^3 + 7x^2 - 9x + 2$
$x^4 - 13x^2 + 2x + 20$
$x^4 - x^3 - 2x^2 - 6x - 4$
$x^4 - 4x^3 - 6x^2 + 17x + 20$
$x^4 + 6x^3 + 13x^2 + 28x + 15$
$x^4 - x^3 + 4x^2 - x + 3$
$x^4 - 31x^2 + 20x + 5$
$x^4 - 4x^3 - x^2 + 10x + 3$
$x^4 - 17x^2 + 20x - 6$
$x^4 + 2x^3 + 10x^2 + 9x + 20$
$x^4 + 2x^3 - 10x^2 - 2x + 1$

$x^4 - 27x^2 + 1$
$x^4 + 3x^3 - 7x^2 - 17x - 4$
$x^4 + x^3 - 12x^2 - 35x - 25$
$x^4 + 2x^3 - x^2 + 10x - 3$
$x^4 + 2x^3 - 22x^2 + 5x + 10$
$x^4 - 21x^2 + 30x - 5$
$x^4 - 4x^3 + x^2 - 20x - 20$
$x^4 + 4x^3 - 6x^2 + 7x - 2$
$x^4 + 9x^3 + 17x^2 - 14x + 2$
$x^4 - x^3 - 5x^2 - 13x - 6$
$x^4 + 3x^3 - 8x^2 - 15x + 15$
$x^4 + 4x^3 - x^2 - 10x + 4$
$x^4 + 7x^3 + 4x^2 - 15x + 5$
$x^4 - x^3 + 3x^2 - x + 2$
$x^4 + x^3 - 8x^2 - 21x - 15$
$x^4 + 3x^3 + 5x^2 + 6x + 6$
$x^4 + 2x^3 + 6x^2 + 4x + 8$
$x^4 - 10x^3 + 27x^2 - 10x - 15$
$x^4 - x^3 - 8x^2 - 9x + 3$
$x^4 - 2x^3 - 13x^2 - 4x + 4$
$x^4 - 7x^3 + 15x^2 - 14x - 10$
$x^4 - 3x^3 + 6x^2 - 9x + 9$
$x^4 - 5x^3 - 4x^2 + 25x - 5$
$x^4 + x^3 - 2x^2 + 17x - 5$
$x^4 + 2x^3 - 2x^2 - 13x - 12$
$x^4 + 3x^3 - 4x^2 + 9x + 9$

1.2 일계수가 아닌 사차식

$10x^4 - 18x^3 + x^2 + 23x - 15$
$9x^4 + 3x^3 - 2x^2 + 21x + 5$
$20x^4 - 21x^3 + 30x - 25$
$15x^4 - 10x^3 + 26x^2 - 4x + 8$
$2x^4 - x^3 - 8x^2 + 2x + 8$
$25x^4 + 10x^3 + 6x^2 + x - 12$
$4x^4 + 15x^2 + 16$
$20x^4 + 33x^3 + 22x^2 - 2x - 8$
$12x^4 + 5x^3 + 2x^2 - 6x - 3$
$2x^4 + x^3 + 10x^2 + 12x + 15$
$8x^4 - 6x^3 - 8x^2 + 9x - 6$
$15x^4 - 18x^3 + 17x^2 - 10x + 3$
$15x^4 - 27x^3 + 34x^2 - 20x + 8$
$10x^4 + 6x^3 + 9x^2 + 3x + 2$
$3x^4 + 19x^3 + 16x^2 - 9x + 1$
$10x^4 + 10x^3 - x^2 - 7x + 6$
$25x^4 - 30x^3 + 21x - 20$
$5x^4 + 12x^3 - 29x^2 + 30x - 25$

$15x^4 + 8x^2 + 17x + 4$
$4x^4 + 7x^3 - 20x^2 + 8$
$16x^4 + 35x^2 + x + 20$
$4x^4 + 7x^3 + 7x^2 - 19x + 10$
$20x^4 - 17x^3 + 35x^2 - 15x + 12$
$4x^4 - 6x^3 + 6x^2 - 15x + 4$
$10x^4 - 2x^3 + 23x^2 - 3x + 12$
$15x^4 - 31x^3 - 3x^2 - 10x - 20$
$5x^4 - 12x^3 - 18x^2 - 9x - 2$
$5x^4 - 2x^3 + 25x^2 - 8x + 20$
$5x^4 + 9x^3 - 20x^2 + 8x - 8$
$12x^4 - x^3 - 13x - 6$
$15x^4 + 40x^3 - 3x^2 - 30x + 5$
$15x^4 - 29x^3 + 28x^2 - 14x + 4$
$3x^4 - 4x^3 - 20x^2 + 16$
$5x^4 - 10x^3 + 12x^2 + 6x - 9$
$4x^4 - 4x^3 - 16x^2 + 10x + 15$
$6x^4 - x^3 - 8x^2 + 20x - 5$

$4x^4 + 17x^3 + 33x^2 + 19x - 10$
$15x^4 + 7x^3 + 3x^2 - 14x - 20$
$4x^4 - 14x^3 + 22x^2 - 17x + 6$
$6x^4 + 9x^3 + 5x^2 - 15x - 25$
$6x^4 + 3x^3 + 10x^2 - 2x + 5$
$9x^4 + 6x^3 - 13x - 12$
$20x^4 - 27x^3 - 26x^2 + 24x + 15$
$3x^4 - 3x^3 - 26x^2 - 5x + 25$
$15x^4 - 22x^3 - 21x^2 + 22x + 12$
$5x^4 + 29x^3 + 4x^2 + 4x - 16$
$2x^4 + 11x^3 + 10x^2 - 13x + 2$
$25x^4 - 10x^3 + 10x^2 - 6x - 3$
$4x^4 + 8x^3 + 3x^2 - 4x - 4$
$15x^4 + 4x^3 - 9x^2 - 14x - 10$
$15x^4 + 15x^3 - 11x^2 - 5x + 2$
$3x^4 + 4x^3 + 16x^2 + 7x + 12$
$3x^4 + 6x^3 + 13x^2 + 2x + 4$
$8x^4 - 8x^3 + 2x^2 + 9$

$12x^4 + 10x^3 + 25x^2 + 11x + 5$

$2x^4 + 5x^3 - 6x^2 - 31x - 20$

$15x^4 + 31x^3 + 23x^2 - 10x - 20$

$8x^4 - 10x^3 - 10x^2 + 25x - 25$

$9x^4 + 3x^3 - 15x^2 + 16x - 10$

$15x^4 - 12x^3 - 2x^2 + 11x - 6$

$12x^4 + 7x^3 - 13x^2 - 18x - 6$

$16x^4 - 20x^3 - 22x^2 + 19x + 10$

$2x^4 - 4x^3 + 11x^2 - 9x + 9$

$12x^4 - 15x^3 - 23x^2 + 11x + 10$

$12x^4 + 25x^3 + 16x^2 - 4x - 16$

$9x^4 + 14x^2 - 8x + 5$

$4x^4 - 16x^3 + 4x^2 + 24x + 9$

$25x^4 - 10x^3 - 35x^2 - 4x + 3$

$5x^4 - 23x^3 + 14x^2 + 15x - 5$

$12x^4 - 17x^3 + 19x^2 - 17x + 12$

$4x^4 + 4x^3 + 8x^2 + 2x + 3$

$3x^4 - 4x^3 + 15x^2 - 4x - 5$

$15x^4 - 11x^3 - 2x^2 + 35x - 25$

$5x^4 + 7x^3 + 20x^2 + 9x + 9$

$10x^4 + 35x^3 + 44x^2 + 10x - 15$

$2x^4 - 12x^3 + 3x^2 + 3x - 4$

$12x^4 + 13x^3 + 6x^2 - 4x - 15$

$16x^4 + 20x^3 - 4x^2 + 5x - 2$

$9x^4 - 9x^3 - 31x^2 + 7x + 12$

$4x^4 - 5x^3 + 2x^2 + 17x - 12$

$4x^4 - 13x^3 - 27x^2 + 3x + 9$

$3x^4 + 11x^3 + 4x^2 + 6x + 4$

$5x^4 - 7x^3 - 6x^2 - 13x - 5$

$10x^4 - 16x^3 + 7x^2 - 3x - 3$

$4x^4 + 2x^3 + 14x^2 + 7x + 15$

$15x^4 + 21x^3 + 11x^2 + 11x - 10$

$10x^4 - x^3 - 2x^2 - 9x - 10$

$16x^4 - 16x^3 + 15x^2 + x - 10$

$15x^4 - 5x^3 - 4x^2 + 37x - 15$

$9x^4 - 15x^3 - 24x^2 + 20x + 16$

$9x^4 + 6x^3 + 19x - 20$

$6x^4 - 20x^3 - x^2 + 24x + 5$

$4x^4 - 16x^3 + 15x^2 + 2x - 1$

$10x^4 + 7x^3 + x^2 + 3x - 10$

$3x^4 + 8x^3 - 20x^2 + 1$

$4x^4 + 21x^3 + 10x^2 - 7x - 6$

$10x^4 - 6x^3 - 23x^2 + 9x + 12$

$12x^4 + 2x^3 - 7x^2 - 16x - 15$

$10x^4 - 20x^3 - 33x^2 + 16x + 20$

$25x^4 + 5x^3 + 8x^2 + x + 1$

$15x^4 + 40x^3 + 17x^2 - 16$

$5x^4 + 15x^3 + 18x^2 - 6x - 8$

$20x^4 - x^3 + 12x^2 + 8x - 15$

$2x^4 - 2x^3 - 3x^2 - 3x - 9$

$25x^4 - 15x^3 + 5x^2 - 6x - 2$

$15x^4 + 20x^3 + 24x^2 + 12x + 9$

$5x^4 - 22x^3 - 36x^2 - 35x - 20$

$25x^4 - 9x^2 + 14x - 12$

$8x^4 - 14x^3 + 9x^2 - 8x - 4$

$20x^4 + 15x^3 - 11x^2 + 3x - 3$

$15x^4 - 34x^3 - 12x^2 + 29x + 12$

$12x^4 + x^3 - 41x^2 + 3x + 9$

$5x^4 - 3x^3 + 9x^2 - 6x - 2$

$3x^4 - 18x^3 + 10x^2 - 11x - 12$

$5x^4 + 7x^3 - 9x^2 + 7x - 2$

$4x^4 - 10x^3 + 8x^2 - 15x + 3$

$5x^4 + 5x^3 + 13x^2 + 3x + 6$

$4x^4 - 14x^3 + 2x^2 + 17x + 3$

$8x^4 + 3x - 1$

$15x^4 - 10x^3 - 22x^2 + 35x - 12$

$4x^4 - 7x^3 + 25x^2 - 17x + 10$

$9x^4 + 9x^3 + 8x^2 + 2x + 8$

$15x^4 - 12x^3 - 2x^2 - 7x - 2$

$10x^4 + 18x^3 + 27x^2 + 7x + 15$

$15x^4 - 34x^3 + 29x^2 - 18x + 3$

$5x^4 - 20x^3 - 23x^2 + 20x - 3$

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

$8x^4 + 12x^2 + x + 6$

$3x^4 - 12x^3 - 10x^2 + 27x + 20$

$12x^4 + 11x^3 - 3x^2 - 7x - 2$

$5x^4 - 5x^3 + 27x^2 - 25x + 10$

$20x^4 + 3x^3 - 31x^2 - 3x + 6$

$20x^4 + 3x^3 + 36x^2 + 25$

$4x^4 + 9x^2 - 3x + 20$

$12x^4 - 17x^3 + 26x^2 - 14x + 8$

$8x^4 + 4x^3 - 10x^2 - 21x - 20$

$2x^4 - 2x^3 - 5x^2 + 5x - 1$

$16x^4 - 8x^3 - 3x^2 + x + 2$

$4x^4 - 14x^3 + 25x^2 - 7x - 5$

$15x^4 - 29x^3 - 8x^2 + 23x + 5$

$15x^4 + 7x^3 + 29x^2 - x + 10$

$4x^4 - 15x^3 - 37x^2 + 10x + 8$

$4x^4 - 13x^3 + 20x^2 - 14x + 4$

$3x^4 + 5x^3 - x^2 - 12x - 10$

$4x^4 + 8x^3 + 5x^2 + 19x + 4$

$20x^4 + x^3 - 8x^2 - 4x - 3$

$20x^4 - 29x^3 + 42x^2 - 20x + 15$

$3x^4 - 2x^3 - 10x^2 - 16x - 8$

$15x^4 + 40x^3 + 23x^2 - 1$

$8x^4 + 18x^3 + 29x^2 + 21x + 12$

$25x^4 - 5x^3 - 20x^2 - 9x - 1$

$12x^4 - 5x^3 + 17x^2 - 2x + 8$

$15x^4 - 14x^3 - x^2 + 8x - 2$

$12x^4 - 5x^3 - 29x^2 + 13x + 10$

$6x^4 + 5x^3 - 3x^2 + 5x + 20$

$4x^4 + 8x^3 - 3x^2 - 13x - 10$

$12x^4 - 21x^3 - 7x^2 + 15x + 4$

$20x^4 + 9x^3 + 7x^2 + 3x + 9$

$5x^4 + 17x^3 - 30x^2 + 20x - 8$

$5x^4 - 23x^3 + 7x^2 - 14x - 10$

$5x^4 - 16x^3 - 5x^2 + 10x + 3$

$2x^4 + 7x^3 - 12x^2 - 14x + 8$

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

$12x^4 + 23x^3 + 32x^2 + 24x + 8$

$5x^4 + 19x^3 - 20x^2 - x + 3$

$25x^4 - 9x^2 + 6x - 2$

$6x^4 + 2x^3 - 33x^2 + 29x - 5$

$2x^4 + 6x^3 - 19x^2 - 9x - 1$

$6x^4 - 11x^3 + 20x^2 - 18x + 8$

$25x^4 - 30x^3 + 10x^2 + 11x - 12$

$5x^4 + 10x^3 - 13x^2 - 18x + 9$

$8x^4 + 10x^3 - 5x^2 + 18x - 15$

$25x^4 + 20x^3 + 3x^2 + 8x - 16$

$6x^4 - 19x^3 + 30x^2 - 28x + 16$

$20x^4 + 29x^3 + 37x^2 + 19x + 12$

$10x^4 + 18x^3 + 13x^2 + 6x - 5$

$6x^4 - 3x^3 + 7x^2 + 6x + 8$

$16x^4 + 8x^3 - 19x^2 - 29x - 12$

$9x^4 + 21x^3 + 13x^2 + 8x - 2$

$2x^4 - 4x^3 + 3x^2 - x - 1$

2. 오차식의 인수분해

2.1 일계수 오차식

$x^5 - 27x^3 + 34x^2 - 28x + 8$
$x^5 - 3x^4 - 3x^3 - 15x^2 + 10x - 4$
$x^5 + 8x^4 + 20x^3 + 13x^2 - 9x - 3$
$x^5 - 29x^3 - 6x^2 - 17x - 12$
$x^5 + 5x^4 + 10x^3 + 8x^2 + 4x - 8$
$x^5 + 5x^4 + 13x^3 + 29x^2 + 25x + 25$
$x^5 + 5x^4 - x^3 + 11x^2 - x - 3$
$x^5 + x^4 - 12x^3 + 5x^2 - x + 10$
$x^5 - 9x^4 + 25x^3 - 22x^2 + x + 2$
$x^5 + x^4 - 11x^3 + 36x^2 - 32x + 20$
$x^5 - 29x^3 - 4x^2 - 16x + 8$
$x^5 + x^4 - 21x^3 - 7x^2 + 17x - 5$
$x^5 - 8x^4 + 10x^3 + 16x^2 + 7x + 1$
$x^5 - 7x^4 + 9x^3 + 6x^2 + 2x - 2$
$x^5 - 2x^4 - 13x^3 - 33x^2 - 20x - 3$
$x^5 - 6x^4 + 3x^3 + 5x^2 + 6x + 1$
$x^5 + 4x^4 - 10x^3 + 4x^2 + 29x - 20$
$x^5 - 6x^4 + 3x^3 + 13x^2 - 2x + 3$
$x^5 + 9x^4 + 24x^3 + 21x^2 + 19x + 4$
$x^5 + 2x^4 - 16x^3 + 12x^2 - 5x + 1$
$x^5 + 7x^4 + 14x^3 + 4x^2 - 8x - 3$
$x^5 + x^4 - 9x^3 + 6x^2 + 6x + 1$
$x^5 + 8x^4 + 15x^3 - 5x^2 - 6x - 1$
$x^5 - x^4 + 8x^3 - 5x^2 + 17x - 10$
$x^5 - x^4 - 10x^3 + 16x^2 + 6x - 3$
$x^5 + 5x^4 + 4x^3 + 13x^2 + 3x - 6$
$x^5 + 2x^4 + 7x^3 + 5x^2 - 10$
$x^5 + 7x^4 + 18x^3 + 30x^2 + 10x - 3$
$x^5 - 4x^4 + 9x^3 - 15x^2 + 14x - 20$
$x^5 + 5x^4 + 8x^3 + 2x^2 - 18x + 5$
$x^5 - 8x^3 + 9x^2 - 11x + 15$
$x^5 + 3x^4 + 3x^3 - 2x^2 - 4x - 4$
$x^5 + x^4 - x^3 - 9x^2 - 20x + 20$
$x^5 - 27x^3 + 3x^2 - 14x - 3$

$x^5 - 24x^3 - 23x^2 + 4x + 6$
$x^5 - x^4 - 9x^3 - 14x^2 - 24x - 5$
$x^5 - x^4 - 13x^3 - 13x^2 + 26x + 20$
$x^5 - 5x^4 - x^3 - 13x^2 - 22x - 8$
$x^5 - 2x^4 - 10x^3 - 23x^2 + 6x + 10$
$x^5 - x^4 + 6x^3 - x^2 + 5x + 6$
$x^5 + 7x^4 + 18x^3 + 28x^2 + 25x + 5$
$x^5 + 7x^4 + 15x^3 + 18x^2 - 4x - 16$
$x^5 + 10x^4 + 30x^3 + 26x^2 + 9x + 1$
$x^5 - 4x^4 - 2x^3 + 15x^2 - 3x - 9$
$x^5 + x^4 - 6x^3 - x^2 + 9x - 6$
$x^5 - 2x^4 - 8x^3 - 5x^2 + 6x - 6$
$x^5 + 6x^4 - x^3 - 13x^2 + 34x - 15$
$x^5 + 2x^4 - 18x^3 - 14x^2 + 33x + 20$
$x^5 - 5x^4 + 8x^3 - 10x^2 - 13x - 5$
$x^5 - 2x^4 - 6x^3 + 15x^2 + 5x - 25$
$x^5 - 10x^4 + 19x^3 + 29x^2 + 14x + 3$
$x^5 + 6x^4 + 7x^3 + 4x^2 + 14x - 8$
$x^5 - 5x^4 + x^3 - 4x^2 - 4$
$x^5 - 8x^4 + 13x^3 + 5x^2 + 5x + 2$
$x^5 - 5x^4 + 3x^3 - 4x + 2$
$x^5 - 3x^4 + 7x^3 - 8x^2 + 7x - 2$
$x^5 - 2x^4 + 6x^3 - 5x^2 + 5x - 3$
$x^5 - x^4 - 6x^3 + 24x^2 - 22x - 5$
$x^5 + x^4 - 17x^3 + 5x^2 + 13x + 3$
$x^5 + x^4 - 10x^3 - 12x^2 - 12x + 5$
$x^5 - 2x^4 - 24x^3 + x^2 + 40x + 20$
$x^5 - 5x^4 - x^3 + 19x^2 - 14x - 10$
$x^5 - 2x^4 - 8x^3 - 21x^2 - 15x - 9$
$x^5 - 3x^4 - 19x^3 + 13x^2 + 5x - 15$
$x^5 + x^4 - 23x^3 - 29x^2 + 16x + 20$
$x^5 - 4x^4 + 9x^3 - 13x^2 + 12x - 9$
$x^5 + 2x^4 - 11x^3 + 14x^2 - 3x + 6$
$x^5 - 2x^4 + 4x^3 - 4x^2 + 3x + 6$

$x^5 + 7x^4 + 11x^3 + x^2 + 8x + 4$
$x^5 - 5x^4 + 11x^3 - 17x^2 + 26x - 20$
$x^5 - 4x^4 + 3x^3 + 4x^2 - 16x + 6$
$x^5 - 2x^3 + 2x^2 - 15x - 10$
$x^5 - 4x^4 + 4x^3 - 16x^2 + 25x + 25$
$x^5 + 9x^4 + 22x^3 + 16x^2 - 3x + 15$
$x^5 + 5x^4 - 2x^3 + 11x^2 - 3x - 4$
$x^5 - 9x^4 + 12x^3 + 39x^2 + 4x - 12$
$x^5 - 2x^4 + x^3 - 17x^2 - 5x - 20$
$x^5 - 5x^4 + 5x^3 - 14x^2 + 6x + 3$
$x^5 + 4x^4 + 24x^2 + x - 5$
$x^5 + 7x^4 + 18x^3 + 20x^2 - 4x - 15$
$x^5 + 4x^4 + 5x^3 - x^2 + 4x - 5$
$x^5 - 8x^4 + 16x^3 + 3x^2 - 37x + 15$
$x^5 - 5x^4 + 3x^3 - 7x^2 + 18x + 10$
$x^5 - 6x^4 + 8x^3 + 8x^2 - 21x - 15$
$x^5 - 6x^4 + 9x^3 - 7x^2 - 40x - 20$
$x^5 - x^4 + 9x^3 + 20x + 25$
$x^5 - 3x^4 - 2x^3 + 3x^2 + 10x + 6$
$x^5 + 4x^4 - 7x^3 - 33x^2 - 10x + 25$
$x^5 - 5x^4 - 5x^3 + 20x^2 + 36x + 16$
$x^5 - 5x^3 - 3x^2 + 15$
$x^5 - 5x^4 - 2x^3 - 2x^2 + 10x + 4$
$x^5 + x^4 - 3x^3 - 14x^2 - 18x - 9$
$x^5 + 2x^4 - x^3 - 7x^2 - 6x - 3$
$x^5 - 4x^4 - x^3 - 15x^2 - 12x - 9$
$x^5 - 5x^4 - 2x^3 + 13x^2 + 28x + 10$
$x^5 + 5x^4 + x^3 - 3x^2 + 8x + 4$
$x^5 - 2x^4 + 3x^3 - x^2 - 4x - 1$
$x^5 - 8x^4 + 15x^3 - 6x^2 + 11x - 4$
$x^5 + 3x^4 - 3x^3 - 8x^2 + 2x - 10$
$x^5 + 3x^4 + 9x^3 + 11x^2 + 14x + 4$
$x^5 - 3x^4 - 2x^3 + 5x^2 + 7x + 2$
$x^5 + x^4 - 6x^3 + 18x^2 + 2x + 5$

$x^5+8x^4+12x^3-4x^2+5x+3$
$x^5+2x^4-15x^3-x^2+16x+6$
$x^5-5x^4+7x^3-17x^2+5x-15$
$x^5-2x^4-6x^3+4x^2+5x-3$
$x^5-x^4-22x^3+38x^2-20x+3$
$x^5-5x^4+8x^3-7x^2+2x-2$
$x^5-8x^4+15x^3-11x^2-x+12$
$x^5+6x^4+12x^3+11x^2+6x-8$
$x^5+5x^4+3x^3+5x^2+x+3$
$x^5-7x^4+19x^3-32x^2+24x-8$
$x^5-3x^4-4x^3-13x^2+14x+12$
$x^5+x^4-6x^2+8x+5$
$x^5+7x^4+8x^3-15x^2+5x+12$
$x^5-3x^4+6x^3-4x^2+4$
$x^5-9x^4+28x^3-39x^2+35x-20$
$x^5-6x^4+7x^3-3x^2-16x-4$
$x^5-9x^4+12x^3+41x^2-9x-20$
$x^5+4x^4+x^3+28x^2+25x+4$
$x^5+3x^2-25x+15$
$x^5+8x^4+17x^3+5x^2+2x+3$
$x^5-7x^4+14x^3-5x^2-4x+2$
$x^5-2x^4-7x^3+18x^2-11x+2$
$x^5-6x^4+10x^3+5x^2-27x+15$
$x^5-x^4-4x^3-x^2+5x+2$
$x^5-x^4+x^3-x^2+8x-12$
$x^5-10x^4+22x^3+14x^2+5x+3$
$x^5+x^4-x^3-15x^2-15x-25$
$x^5+x^4-18x^3+7x^2+17x+4$
$x^5-x^4-12x^3+20x+25$
$x^5+3x^4+2x^3-7x^2-8x+2$
$x^5-4x^4+10x^3-13x^2+7x-5$
$x^5-6x^4+3x^3+19x^2+2x+5$
$x^5-3x^4+6x^3-4x^2+2x+1$
$x^5-5x^4-10x^3+22x^2+40x+15$
$x^5+10x^4+29x^3+24x^2+23x+4$
$x^5-4x^4+6x^3-8x^2-7x-20$
$x^5+4x^4+7x^3+7x^2-9$
$x^5-4x^4+3x^3-17x^2-22x-6$
$x^5-3x^4-7x^3+5x^2+12x+12$
$x^5-3x^4-6x^3+17x^2-19x+4$
$x^5+7x^4+7x^3-22x^2-8x+3$
$x^5+3x^4+2x^3-11x^2-15x+6$
$x^5-6x^4+16x^3-25x^2+22x-20$
$x^5+x^4-24x^3-4x^2-6x+4$
$x^5+x^4-4x^3-4x^2-4x+16$
$x^5-7x^4+13x^3+5x^2-27x-15$
$x^5+x^4+12x^2+2x-1$
$x^5+4x^4+7x^3+2x^2-9x-12$
$x^5-3x^4+9x^3-16x^2+20x-16$
$x^5+2x^4+5x^3+11x^2+16x-5$
$x^5+2x^4+2x^3+5x^2-5x+1$
$x^5+2x^4-10x^3+14x^2+31x+10$
$x^5+2x^4-4x^3-15x^2-3x+1$
$x^5+6x^4+14x^3+18x^2+15x+9$
$x^5+4x^4+3x^3+11x^2+2x+6$
$x^5-4x^4-2x^3-19x^2-2x+8$
$x^5+2x^4-18x^3-30x^2-13x-5$
$x^5-8x^4+13x^3+21x^2-30x-25$
$x^5-3x^3-3x^2-8x-3$
$x^5+x^4-8x^3-8x^2+14x+15$
$x^5-7x^4+13x^3-2x^2-6x+6$
$x^5+x^4-10x^3-3x^2+17x+6$
$x^5+3x^4-3x^3+6x^2-14x+3$
$x^5-4x^4+3x^3-6x^2-5x+20$
$x^5+6x^4+8x^3+4x^2-32x+16$
$x^5-6x^4+10x^3-5x^2-6$
$x^5-x^4-21x^3+27x^2-26x+8$
$x^5-8x^3-19x^2-6x+8$
$x^5+x^4-12x^3-2x^2-16x-5$
$x^5+5x^4+3x^3-15x^2-11x+15$
$x^5+x^4-18x^3-22x^2+20x+25$
$x^5+7x^4+12x^3+17x^2-25x+6$
$x^5-x^3+x^2+2x+3$
$x^5-2x^4-5x^3+7x^2+4x-2$
$x^5-4x^4-5x^3+14x^2+27x+12$
$x^5+2x^4-x^3-7x^2+x+12$
$x^5-x^4-20x^3+5x^2+12x-4$
$x^5+2x^4-6x^3-6x^2-x+1$

2.2 일계수가 아닌 오차식

$2x^5+6x^4+13x^3+14x^2+11x+3$
$15x^5+2x^4-12x^3+25x^2-13x+5$
$15x^5-5x^4-18x^3-23x^2-12x-2$
$8x^5-12x^4-22x^3-2x^2+30x+25$
$20x^5+9x^4-12x^3+23x^2-10x+15$
$20x^5-5x^4-7x^3-34x^2-7x+3$
$4x^5+2x^4+18x^3-x^2+19x-15$
$10x^5-5x^4+14x^3-18x^2-10x+25$
$9x^5+3x^4-21x^3-14x^2-22x-20$
$2x^5+11x^4-7x^3-19x^2+8x+4$
$8x^5+26x^4+13x^3+18x^2+11x+4$
$5x^5-23x^3+10x^2+7x+6$
$2x^5+7x^4+4x^3+5x^2+15x-3$
$16x^5-17x^3-34x^2+4x+16$
$16x^5-20x^4+8x^3+14x^2-13x+4$
$6x^5-2x^4-8x^3-7x^2+5x+3$
$4x^5-16x^4-21x^3-39x^2-23x-15$
$3x^5-7x^4+x^3-16x^2-8$
$4x^5+11x^4-7x^3-22x^2-24x-12$
$6x^5-x^4+2x^3+3x^2-13x+6$
$10x^5-9x^4-6x^3-14x^2-13x+4$
$10x^5-21x^4+21x^3-10x^2+13x-3$
$12x^5+25x^4+26x^3+x^2-18x-10$
$3x^5-12x^4-5x^3+19x^2+18x+5$
$8x^5+6x^4+21x^3+12x^2+16x+15$
$12x^5+29x^4+31x^3+35x^2+24x+4$
$16x^5-20x^4-28x^3+5x^2+10x+25$
$12x^5+15x^4+11x^3+13x^2-30x+9$
$8x^5-14x^4+9x^3-18x^2+20x-8$
$9x^5+3x^4+20x^2-20x-25$
$12x^5+9x^4-20x^3-3x^2+8x-2$
$4x^5+20x^4+17x^3+24x^2+10x-3$
$15x^5+37x^4+54x^3+15x^2-x-12$
$15x^5+24x^4+x^3+9x^2+16x-5$
$4x^5-10x^4+18x^3-29x^2+30x-8$
$6x^5+19x^4+8x^3-10x^2-15x+4$
$8x^5-8x^4-2x^3-6x^2-3x+9$
$3x^5-6x^4+2x^3-21x^2-2x-20$
$15x^5+27x^4+32x^3+9x^2-3x-10$
$4x^5+7x^4-23x^3-2x^2+28x-16$
$20x^5+32x^4+11x^3+x^2-4x+6$
$20x^5+3x^4-18x^3+15x^2-29x+15$
$4x^5+3x^4-4x^3-13x^2-5x-25$
$5x^5-17x^4+20x^3-21x^2+10x-4$
$15x^5+31x^4+16x^3+5x^2-2x-2$
$16x^5+16x^4+7x^3-5x^2-8x-4$
$16x^5+16x^4-4x^3-20x^2-7x+4$
$4x^5+14x^4-11x^3+2x^2+x-1$
$20x^5+12x^4-24x^3+17x^2-6x+1$
$12x^5+7x^4+15x^3+13x^2+7x+6$
$9x^5-3x^4-18x^3+2x^2-20x-25$
$12x^5+15x^4-10x^3+19x^2+x+5$
$15x^5+11x^4+24x^3+34x^2+5x-5$
$20x^5-21x^4-3x^3-27x^2-8x-6$

$4x^5 - 18x^4 + 22x^3 - x^2 - 18x + 9$

$15x^5 + 26x^4 - 20x^3 - 34x^2 - 3x + 4$

$9x^5 + 3x^4 + 27x^3 - 10x^2 + 20x - 25$

$9x^5 - 6x^4 + 4x^3 - 7x^2 - 10x - 8$

$9x^5 - 18x^4 - x^3 - 21x^2 + 17x + 20$

$4x^5 - 7x^4 + 4x^3 - 14x^2 - 9x + 10$

$25x^5 - 40x^4 + 30x^3 + 18x^2 - 29x + 20$

$12x^5 + 19x^4 + x^3 - 20x^2 - 4x + 4$

$15x^5 + 17x^4 - 18x^3 + 17x^2 - 9x + 2$

$10x^5 - 18x^4 + 11x^3 - 9x^2 - 15x + 5$

$25x^5 + 25x^4 - 35x^3 - 20x^2 + 10x + 4$

$20x^5 - 37x^4 - 30x^3 + 50x^2 + 19x - 10$

$6x^5 - 11x^4 + 22x^3 - 8x^2 + 15$

$6x^5 + 10x^4 - 19x^3 + x^2 + 29x - 15$

$9x^5 + 3x^4 - 3x^3 - 2x^2 + 4x - 15$

$15x^5 - 12x^4 + 16x^3 + 2x^2 - x - 15$

$12x^5 + 14x^4 - 14x^3 + 19x^2 - 31x + 12$

$8x^5 + 8x^4 - 28x^3 + 14x^2 + 4x - 3$

$4x^5 - 4x^4 + 11x^3 + 2x^2 - 17x - 12$

$5x^5 + 7x^4 - 2x^3 + 28x^2 - 12x + 16$

$4x^5 - 19x^3 - x^2 - 8x + 2$

$12x^5 - 13x^4 - 23x^3 + 16x^2 + 9x + 1$

$3x^5 + 4x^4 - 3x^3 + x^2 + 6x + 9$

$15x^5 - 18x^4 + 8x^3 - 28x^2 + 5x + 10$

$6x^5 + 7x^4 - 18x^3 - 33x^2 + 16$

$10x^5 + 10x^4 - 12x^3 - 7x^2 - 16x - 12$

$6x^5 - 22x^4 + 27x^3 - 7x^2 - 21x - 4$

$20x^5 - 26x^4 + 17x^3 - 2x^2 - x + 1$

$5x^5 - 17x^4 - 11x^3 + 18x^2 - 1$

$5x^5 + 4x^4 + 14x^3 + 5x^2 + 8x - 6$

$9x^5 + 15x^4 + 9x^3 + 25x^2 + 2x + 10$

$20x^5 + 25x^4 + 46x^3 + 19x^2 + 10x - 8$

$25x^5 - 10x^4 - 3x^3 - 14x^2 + 5x + 2$

$5x^5 + 10x^4 - 22x^3 - 24x^2 + 13x - 15$

$10x^5 - 19x^4 + 29x^3 - 33x^2 + 18x - 12$

$20x^5 - 35x^4 + 6x^3 + 5x^2 - 14x + 10$

$5x^5 + 15x^4 + 5x^3 - 2x^2 - 14x + 4$

$8x^5 + 16x^4 + 10x^3 + 24x^2 + 5$

$3x^5 - 8x^4 + 25x^3 - 27x^2 + 22x + 15$

$25x^5 + 15x^4 - 34x^3 - 29x^2 - 7x + 12$

$10x^5 - 7x^4 + 7x^3 - 4x^2 + 21x - 15$

$10x^5 - 25x^4 + 13x^3 + 5x^2 + 4x + 20$

$12x^5 - 12x^4 + 19x^3 + 2x^2 + 5x + 2$

$25x^5 + 15x^4 - 5x^3 - 27x^2 - 21x - 9$

$20x^5 - 25x^4 + 32x^3 - 10x^2 + 7x + 6$

$8x^5 + 6x^4 - 21x^3 + 7x^2 - 5x - 20$

$9x^5 + 6x^4 + 30x^3 + 16x^2 + 25x + 10$

$5x^5 - 6x^4 + 7x^3 + 14x^2 - 4x + 6$

$2x^5 + 6x^4 + 11x^3 + 20x^2 + x + 20$

$15x^5 + 10x^4 - 21x^3 + 15x^2 + 2x - 3$

$20x^5 - 36x^4 + 35x^3 - 26x^2 + 11x - 2$

$15x^5 + 12x^4 - 16x^3 + 19x^2 - 2x - 4$

$5x^5 + 4x^4 + 5x^3 - x^2 - 1$

$20x^5 + 25x^4 - 8x^3 - 30x^2 + 8$

$5x^5 - 7x^4 - 19x^3 - 4x^2 - 16x - 8$

$15x^5 + 28x^4 - 21x^3 + x^2 + 11x - 6$

$2x^5 - 3x^4 - 10x^3 + 2x^2 + 18x + 15$

$3x^5 + 13x^4 - 10x^3 + 32x^2 - 13x + 15$

$20x^5 - 13x^4 + 18x^3 - 9x^2 + 2x - 4$

$8x^5 - 8x^4 - 22x^3 + 7x + 5$

$10x^5 + 6x^4 - 15x^3 + 3x^2 + 5x - 3$

$2x^5 + 2x^4 - 3x^3 - 8x^2 - 8x + 12$

$8x^5 - 10x^4 - 25x^3 + 9x^2 + 6x - 8$

$9x^5 + 3x^4 + 3x^3 + 15x^2 - 4x + 6$

$25x^5 - 25x^4 - 4x^3 + 32x^2 - 18x + 5$

$15x^5 + 23x^4 + 8x^3 - 16x^2 - 6x + 4$

$20x^5 - 7x^4 + 2x^3 - 10x^2 - 31x - 10$

$4x^5 + 8x^4 - 23x^3 + 47x^2 - 36x + 20$

$6x^5 + 12x^4 - 13x^3 - 29x^2 + 25$

$5x^5 - 23x^4 - 10x^3 - 23x^2 - 25x - 4$

$25x^5 + 10x^4 - 58x^3 + 5x^2 + 37x - 15$

$3x^5 - 11x^4 + 13x^3 - 2x + 15$

$12x^5 - 11x^3 + 20x^2 - 5x - 25$

$4x^5 + 17x^4 + 22x^2 - 6x + 8$

$2x^5 - 3x^4 - 8x^3 + 4x^2 + 11x + 6$

$4x^5 + 5x^3 + 16x^2 - 6x - 12$

$4x^5 - 6x^4 - 15x^3 - 21x^2 - 14x + 12$

$15x^5 - 34x^4 - 11x^3 + 31x^2 - 7x - 12$

$3x^5 + 10x^4 + 15x^3 + 16x^2 + 21x + 12$

$8x^5 + 2x^4 + 2x^3 + 4x^2 + 3x - 4$

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

$10x^5 - 8x^4 - 13x^3 - 22x^2 - 9x - 6$

$9x^5 + 24x^4 + 21x^3 - 23x + 4$

$3x^5 - 14x^4 + 4x^3 + 9x^2 - 8x + 20$

$6x^5 - 22x^4 + 41x^3 - 33x^2 + 7x + 10$

$12x^5 + 5x^4 + 10x^3 - 9x^2 + 10x - 15$

$2x^5 - x^4 - 19x^2 + 2x - 12$

$6x^5 - 15x^4 - 8x^3 - 25x^2 - 8x - 10$

$6x^5 - 23x^4 + 22x^3 + 15x^2 - 35x + 12$

$3x^5 + 8x^4 - 8x^3 + 3x^2 - 8x - 16$

$5x^5 - 20x^4 - 34x^3 - 12x^2 - 17x - 6$

$9x^5 - 6x^4 - 17x^3 - 15x^2 - 14x - 5$

$15x^5 + 19x^4 - 6x^3 + 32x^2 + 22x - 5$

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

$5x^5 - 30x^4 + 48x^3 - 20x^2 + 15x - 25$

$20x^5 + 11x^4 - 19x^3 - 13x^2 - 4$

$4x^5 + 13x^4 - 25x^3 - 22x^2 + 16x + 10$

$15x^5 - 17x^4 - 21x^3 + 30x^2 - 16x - 5$

$25x^5 - 15x^4 + 36x^3 + 13x^2 + 19x + 12$

$15x^5 + 2x^4 + 12x^3 + 9x^2 - 5x + 5$

$4x^5 + 4x^4 - 5x^3 + 3x^2 - 7x - 10$

$2x^5 - 5x^4 + x^3 - 13x + 5$

$6x^5 - 12x^4 - 17x^3 + 8x^2 + 28x + 12$

$20x^5 - 12x^4 + 7x^3 - 32x^2 - 9x - 10$

$6x^5 + x^4 - 7x^3 + 34x^2 - 20x + 16$

$25x^5 - 10x^4 - 20x^3 + 32x^2 - 15x - 4$

$5x^5 - 10x^4 - 5x^3 - 12x^2 - 6x + 4$

$20x^5 - 9x^4 + 8x^3 - 6x^2 - 2x + 1$

$9x^5 - 24x^4 + 12x^3 + 2x^2 + 3x + 1$

$3x^5 - 13x^4 - 3x^3 - 12x^2 - 36x - 16$

$4x^5 + 24x^4 + 5x^3 - 14x^2 - 19x + 12$

$10x^5 + 22x^4 + 19x^3 - 20x^2 - 26x + 5$

$9x^5 - 21x^3 + 3x^2 + 7x - 2$

$8x^5 + 2x^4 - 14x^3 - 8x^2 - 15x + 6$

$5x^5 + 14x^4 + 7x^3 + 19x^2 + 8x + 12$

$9x^5 + 21x^4 + 18x^3 + x^2 - 5x - 2$

$16x^5 + 32x^4 + 39x^3 + 4x^2 - 16x - 15$

$2x^5 + 10x^4 + 2x^3 - 23x^2 - 27x - 9$

$6x^5 + 13x^4 + 28x^3 + 23x^2 + 17x - 15$

$3x^5 + 8x^4 - 24x^3 - 4x^2 - 11x - 20$

$5x^5 - 9x^4 + 29x^3 - 19x^2 - x + 5$

$15x^5 + 29x^4 - 4x^3 - 28x^2 - 30x - 15$

$6x^5 + 20x^4 + 27x^3 + 18x^2 - 2x - 4$

$20x^5 - 11x^4 - 39x^3 + 32x^2 - 5x - 25$

$9x^5 + 9x^4 - 10x^3 - 18x^2 - 8x + 15$

$15x^5 + 9x^4 - 27x^3 - 20x^2 + 14x + 8$

3. 육차식의 인수분해

3.1 일계수 육차식 1형

$$x^6+6x^5+x^4-22x^3+21x^2-15$$
$$x^6-x^5+3x^4-x^3-3x^2+9x-20$$
$$x^6-3x^5-x^4-13x^3+5x^2+21x-5$$
$$x^6-6x^5+29x^3+4x^2-20x+4$$
$$x^6-4x^5+6x^4-14x^3+17x^2-10x+25$$
$$x^6-9x^5+17x^4+12x^3-x^2-3x-1$$
$$x^6-6x^5+2x^4+21x^3+10x^2+6x-4$$
$$x^6+2x^5-11x^4+15x^3+6x^2-12x+20$$
$$x^6+10x^5+15x^4-46x^3+45x^2-20x+4$$
$$x^6+x^5-15x^4+31x^3+x^2-19x+15$$
$$x^6-x^5-2x^4+3x^3+2x^2-2x-3$$
$$x^6+3x^5+8x^4-37x+20$$
$$x^6+x^5-25x^4+15x^3+15x^2-13x+3$$
$$x^6+3x^5+2x^4+7x^3-2x^2+4x-5$$
$$x^6+8x^5+20x^4+16x^3-5x^2-18x-9$$
$$x^6-x^5+x^4+6x^3-3x^2+4x+12$$
$$x^6-x^5-13x^4+3x^3+x^2-9x-3$$
$$x^6-8x^4-35x^3-26x^2-13x+15$$
$$x^6-5x^5+6x^4+13x^3-45x^2+16$$
$$x^6-4x^5+4x^4-20x^3+8x^2-8x+4$$
$$x^6+5x^5-x^4+15x^3-x^2+5x+4$$
$$x^6-x^5-13x^4-x^3+13x^2-7x+1$$
$$x^6+8x^5+6x^4-29x^3+46x^2-28x+8$$
$$x^6+4x^5+3x^4+11x^3+26x^2+7x-2$$
$$x^6-x^5-21x^4+36x^3-5x^2-9x+3$$
$$x^6+x^5-15x^4+30x^3-2x^2+15x+6$$
$$x^6-2x^5-21x^4-12x^3-9x^2-2x-3$$
$$x^6+2x^5-15x^4-18x^3-4x^2+x-3$$
$$x^6+4x^5-2x^4+2x^3+15x^2+x-6$$
$$x^6-6x^5+13x^4-15x^3+4x^2-6$$
$$x^6-8x^5+15x^4+x^3-2x+2$$
$$x^6-3x^5+7x^4-18x^3+12x^2-20x+16$$
$$x^6+x^5-7x^4-6x^3+14x^2+10x-8$$
$$x^6-5x^5+11x^4-12x^3+12x^2-x-2$$
$$x^6-x^5-4x^4+8x^3+x^2-7x-2$$
$$x^6+4x^5-12x^4-7x^3+38x^2-17x-5$$
$$x^6-8x^5+16x^4-4x^3+4$$
$$x^6+x^5-12x^4+34x^3-8x^2-25x-6$$
$$x^6-x^5-2x^4-4x^3-16x^2-9x+4$$
$$x^6+4x^5-5x^4-12x^3+14x^2+12x-9$$
$$x^6+2x^5+3x^4+11x^3+10x^2+9x+20$$
$$x^6+x^5-18x^4-17x^3-39x^2-16x-16$$
$$x^6+5x^5+x^4+3x^3-27x^2+x+10$$
$$x^6-x^5-22x^4-3x^3+12x^2+4x+3$$
$$x^6+x^5-12x^4+34x^3-50x^2+35x-12$$
$$x^6+5x^5-4x^4-21x^3+4x-20$$
$$x^6+3x^5-5x^4-15x^3+15x^2+25x-25$$
$$x^6-x^5-x^4-5x^3+4x^2+4x+4$$
$$x^6+x^5-5x^4+9x^3+20x^2+32x+20$$
$$x^6-6x^5+11x^4-13x^3-26x^2-20x-10$$
$$x^6-x^5-2x^4-15x^3+14x^2+28x-15$$
$$x^6+2x^5-2x^4-8x^3-5x^2+3x+4$$
$$x^6-x^5-2x^4-9x^3+4x^2+8x+20$$
$$x^6-5x^5+2x^4+5x^3-24x^2-14x+5$$
$$x^6+9x^5+15x^4-26x^3-2x^2+15x-6$$
$$x^6+4x^5+4x^4+7x^3-20x^2+13x-3$$
$$x^6-4x^5+2x^4+20x^3-31x^2+8x+16$$
$$x^6-3x^5+2x^4+4x^3-38x^2+5x+20$$
$$x^6-5x^5-3x^4+27x^3+9x^2-17x+3$$
$$x^6-5x^5+6x^4+3x^3-24x^2+40x-15$$
$$x^6+8x^5+22x^4+27x^3-2x^2-4x-8$$
$$x^6+6x^5+12x^4+12x^3-14x^2-4x+3$$
$$x^6+x^5-22x^4-14x^3+4x^2-3x+6$$
$$x^6-2x^5-4x^4-6x^3+17x^2+14x-5$$
$$x^6+x^5-2x^4-17x^3+8x^2+10x-5$$
$$x^6-5x^5+3x^4-12x^3+10x^2+x+12$$
$$x^6-16x^4+34x^3+8x^2-24x-8$$
$$x^6-5x^5-6x^4+16x^3-6x^2-3x-6$$

$$x^6 - 2x^5 - 6x^4 - 21x^3 + 13x^2 - x + 10$$
$$x^6 - 21x^4 + 16x^3 - 4x^2 - 7x + 3$$
$$x^6 + 3x^5 - 13x^4 + 21x^3 + 9x^2 - 19x - 6$$
$$x^6 + x^5 - 5x^4 + 2x^3 - 6x + 8$$
$$x^6 + 3x^5 + 10x^4 + 5x^3 + 7x^2 - 22x + 8$$
$$x^6 - 7x^5 + 7x^4 + 15x^3 + 14x^2 + 2x + 8$$
$$x^6 + 8x^5 + 16x^4 + 12x^3 + x^2 - 31x - 20$$
$$x^6 + 2x^5 - 18x^4 - 33x^3 - 44x^2 - 25x - 15$$
$$x^6 - 10x^5 + 27x^4 - 7x^3 - 23x^2 - 18x - 10$$
$$x^6 + 2x^5 - 21x^4 - 17x^3 + 9x^2 + 10x + 2$$
$$x^6 - 3x^5 + 5x^4 - 3x^3 - 5x^2 - x - 15$$
$$x^6 + 4x^5 + 3x^4 - 10x^3 - 20x^2 - 15x + 25$$
$$x^6 + 5x^5 - 3x^4 - 18x^3 + 4x^2 - 7x - 12$$
$$x^6 - 7x^5 + 9x^4 + 37x^2 + 15x + 25$$
$$x^6 + 2x^5 + 2x^4 - 6x^3 - 9x^2 - 5x + 12$$
$$x^6 + 3x^5 - 8x^4 + 2x^3 + 21x^2 - 16x + 15$$
$$x^6 + x^5 + 10x^4 + x^3 + 26x^2 - 20x - 5$$
$$x^6 - 2x^5 - 16x^4 - 34x^3 - x^2 + 22x - 6$$
$$x^6 + 7x^5 + 3x^4 - 38x^3 - x^2 + 27x + 9$$
$$x^6 - 2x^5 + x^4 - 3x^3 - 8x^2 + 4x + 2$$
$$x^6 - 3x^5 - 3x^4 - 23x^3 + x^2 + 41x - 20$$
$$x^6 - x^5 + 3x^4 - 6x^3 - 14x^2 - 33x - 20$$
$$x^6 + 5x^5 + x^4 + 13x^3 - x^2 - 11x - 3$$
$$x^6 - x^5 - 13x^4 + 10x^3 + 30x^2 - 13x - 20$$
$$x^6 - 6x^5 + 4x^4 + 13x^3 - 22x^2 + 20x - 16$$
$$x^6 - 33x^4 + 2x^3 + 56x^2 - 8x - 15$$
$$x^6 - 21x^4 + 24x^3 - 10x + 4$$
$$x^6 + 3x^5 + 4x^4 + 10x^3 + 23x^2 - 8x - 3$$
$$x^6 + 5x^5 + 4x^4 - 10x^3 - 16x^2 - 16x - 8$$
$$x^6 + x^5 - 13x^4 + 33x^3 - 19x^2 - x + 1$$
$$x^6 + 6x^5 + 2x^4 - 14x^3 + 31x^2 - 29x + 10$$
$$x^6 - 2x^5 + 4x^4 - 10x^3 + 9x^2 - 11x + 12$$
$$x^6 - x^5 - 8x^4 + 4x^3 - 13x^2 - 3x - 4$$
$$x^6 + 9x^5 + 14x^4 - 23x^3 + 18x^2 - 22x - 15$$
$$x^6 + 2x^5 - 18x^4 - 2x^3 + 39x^2 - 40x + 15$$
$$x^6 + 6x^5 + 4x^4 - 5x^3 + 5x^2 - 23x - 12$$
$$x^6 - 10x^4 + 5x^3 - 2x^2 + 2x - 6$$
$$x^6 + 4x^5 - 2x^4 - 12x^3 + 5x^2 - 16x - 16$$
$$x^6 - 8x^5 + 16x^4 + 5x^3 - 10x^2 - 45x - 25$$
$$x^6 - 2x^5 - 7x^4 + 24x^3 - 16x^2 + 5x + 25$$
$$x^6 - 24x^4 + 19x^3 - 32x^2 + 11x - 5$$
$$x^6 - 2x^5 - 8x^4 - 16x^3 + 3x^2 + 9x + 2$$
$$x^6 - x^5 - 24x^4 - 8x^3 - 13x^2 - 20x + 15$$
$$x^6 + 5x^5 - x^4 + 12x^3 - 40x^2 + 4x + 16$$
$$x^6 + 7x^5 + 5x^4 - 34x^3 - 19x^2 + 32x + 20$$
$$x^6 - 5x^5 + 13x^4 - 24x^3 + 17x^2 - 10x - 10$$
$$x^6 - x^5 - 2x^4 - 3x^3 - 18x^2 - 12x + 5$$
$$x^6 - 3x^5 - 15x^4 + 14x^3 + 10x^2 + 10x + 4$$
$$x^6 - x^5 - 2x^4 - 8x^3 + 26x^2 + 7x - 20$$
$$x^6 - 3x^5 - 6x^4 + 4x^3 + 28x^2 + 32x + 16$$
$$x^6 - 5x^5 + 9x^4 - 14x^3 - 3x^2 - 3x - 9$$
$$x^6 + 7x^5 + 12x^4 - 6x^3 - 20x^2 - 3x + 4$$

3.2 일계수 육차식 2형

$$x^6 - 2x^5 - 14x^4 + 18x^3 + 61x^2 - 32x - 80$$
$$x^6 - 6x^5 - 17x^4 + 120x^3 - 75x^2 - 100x + 50$$
$$x^6 - 4x^5 - 3x^4 - x^3 + 6x^2 + 39x - 18$$
$$x^6 + 9x^5 + 26x^4 + 43x^3 + 29x^2 - 18$$
$$x^6 + 2x^5 + 5x^4 + 2x^3 + 29x^2 + 50x + 100$$
$$x^6 - x^5 + 7x^4 - 2x^3 + 19x^2 - 9x + 45$$
$$x^6 + 3x^5 - 9x^4 - 11x^3 - 22x^2 + 2x + 12$$
$$x^6 - 2x^5 - 23x^4 + 18x^3 + 112x^2 + 88x + 16$$
$$x^6 - 6x^5 + 7x^4 - 36x^3 + 15x^2 - 70x - 100$$
$$x^6 - 6x^5 + 9x^4 - 12x^3 + 11x^2 + 48x - 36$$
$$x^6 + 5x^5 + 3x^4 - 3x^3 - 17x^2 - 19x - 6$$
$$x^6 - 8x^5 + 16x^4 - 30x^3 + 50x^2 + 50x - 25$$
$$x^6 - 4x^5 - 9x^4 + 33x^3 - 102x^2 + 31x + 10$$
$$x^6 + 3x^5 - 9x^4 - 19x^3 + 22x^2 + 2x - 4$$
$$x^6 + 11x^5 + 36x^4 + 31x^3 - 33x^2 - 70x + 40$$
$$x^6 - 3x^5 - 13x^4 + 39x^3 + 14x^2 - 42x - 20$$
$$x^6 - 3x^5 - 7x^4 - 25x^3 - 15x^2 - 83x - 30$$
$$x^6 + 2x^5 - 10x^4 - 4x^3 + 22x^2 - 30x + 15$$
$$x^6 + x^5 - 12x^4 + 33x^3 - 84x^2 + 41x - 5$$
$$x^6 - 12x^5 + 43x^4 - 48x^3 + 24x^2 + 104x + 32$$
$$x^6 + 12x^5 + 39x^4 + 14x^3 - 31x^2 - 50x + 30$$
$$x^6 + 8x^5 + 24x^4 + 38x^3 + 30x^2 - 6x - 45$$
$$x^6 - 3x^5 - 10x^4 + 13x^3 - 43x^2 + 66x - 12$$
$$x^6 - 3x^5 - 3x^4 + 14x^3 - 8x^2 - 16x + 20$$
$$x^6 - x^4 - 12x^3 - 38x^2 - 60x - 40$$
$$x^6 - 2x^5 - 21x^4 + 21x^3 + 102x^2 + 65x + 10$$
$$x^6 + 7x^5 - 4x^4 - 49x^3 + 84x^2 + 15x - 45$$
$$x^6 - 13x^5 + 47x^4 - x^3 - 165x^2 - 45x + 50$$
$$x^6 + 4x^5 + 6x^4 + 20x^3 + 10x^2 + 25$$
$$x^6 + 9x^5 + 17x^4 - 17x^3 - 32x^2 + 34x - 8$$
$$x^6 - 4x^5 - 17x^4 + 24x^3 + 154x^2 + 152x + 40$$
$$x^6 + 9x^5 + 22x^4 - x^3 - 69x^2 - 80x + 100$$
$$x^6 - 7x^5 + 12x^4 - 11x^3 + 27x^2 + 68x - 20$$
$$x^6 - 3x^5 - 17x^4 + 36x^3 + 76x^2 - 48x - 80$$
$$x^6 - x^5 - 8x^4 - 9x^3 - 19x^2 + 48x + 48$$
$$x^6 - 13x^4 + 27x^3 + 10x^2 - 81x + 60$$

$$x^6 - 5x^5 + 11x^4 - 17x^3 + 9x^2 + 9x - 4$$
$$x^6 - x^5 - 10x^4 - 19x^3 - 45x^2 + 6x + 8$$
$$x^6 + 3x^5 - 12x^4 + 3x^3 + 72x^2 - 105x - 25$$
$$x^6 + x^5 - 4x^4 - 39x^3 - 100x^2 - 175x - 125$$
$$x^6 + x^5 + 5x^4 - 12x^3 - 17x^2 - 65x - 25$$
$$x^6 + x^5 - 18x^4 - 43x^3 - 138x^2 - 103x - 15$$
$$x^6 - 7x^5 + 18x^4 - 21x^3 - 15x^2 + 70x - 50$$
$$x^6 + 4x^5 - x^4 - 6x^3 + 2x^2 - 28x + 16$$
$$x^6 + 6x^5 + 13x^4 + 18x^3 + 14x^2 + 12x - 16$$
$$x^6 - 3x^5 - 7x^4 - 5x^3 + 16x^2 + 22x - 12$$
$$x^6 - 7x^5 + 16x^4 - 33x^3 + 65x^2 - 78x + 24$$
$$x^6 - 10x^5 + 18x^4 + 50x^3 - 60x^2 - 60x - 9$$
$$x^6 + 4x^5 + 6x^4 + 20x^3 + 14x^2 + 36x + 9$$
$$x^6 - 3x^5 - 5x^4 + 3x^3 - 42x^2 - 2x + 8$$
$$x^6 + 8x^5 + 27x^4 + 51x^3 + 44x^2 + 7x - 30$$
$$x^6 - 8x^5 + 17x^4 - 33x^3 + 76x^2 - 65x - 100$$
$$x^6 - 14x^5 + 62x^4 - 74x^3 - 64x^2 + 40x - 5$$
$$x^6 - 11x^5 + 40x^4 - 65x^3 + 55x^2 + 34x - 12$$
$$x^6 - 4x^5 - 13x^4 + 25x^3 + 36x^2 - 39x - 18$$
$$x^6 - 17x^4 - 40x^3 - 63x^2 + 10x + 4$$
$$x^6 + 3x^5 - 22x^4 - 45x^3 + 6x^2 + 63x - 27$$
$$x^6 - 3x^5 - 12x^4 + 22x^3 + 49x^2 + x - 10$$
$$x^6 + 2x^5 + 4x^4 + 15x^3 + 8x^2 + 22x + 8$$
$$x^6 + 2x^5 - 3x^4 + 2x^3 - 16x^2 - 24x + 48$$
$$x^6 - 11x^5 + 48x^4 - 108x^3 + 123x^2 - 49x - 20$$
$$x^6 + x^5 - 3x^4 - 6x^3 - 9x^2 + 9x + 27$$
$$x^6 + 7x^5 + 12x^4 - x^3 - 21x^2 - 46x - 24$$
$$x^6 - 5x^5 + 13x^4 - 15x^3 - 14x^2 + 52x - 80$$
$$x^6 + 3x^5 - 17x^4 - 24x^3 - 35x^2 + 45x - 9$$
$$x^6 - 3x^5 - 14x^4 - 11x^3 + 69x^2 + 134x + 40$$
$$x^6 - 10x^5 + 27x^4 - 30x^3 + 89x^2 + 40x - 12$$
$$x^6 - 2x^5 - 2x^4 - 6x^3 - 4x^2 - 4x - 1$$
$$x^6 - 3x^5 + 9x^3 + x^2 - 24x + 30$$
$$x^6 + 5x^5 - x^4 + 20x^3 - 16x^2 + 20x - 20$$
$$x^6 + 3x^5 - 30x^4 - 85x^3 + 94x^2 + 47x + 5$$
$$x^6 - x^5 - 12x^4 + 31x^3 - 4x^2 - 105x + 75$$
$$x^6 + 4x^5 - 2x^4 - 6x^3 + 13x^2 - 26x - 8$$
$$x^6 + 3x^5 - 11x^4 - 36x^3 + 4x^2 + 48x + 16$$
$$x^6 - 7x^5 + 7x^4 + 9x^3 + 35x^2 + 21x - 6$$
$$x^6 + 10x^5 + 12x^4 - 80x^3 - 20x^2 + 150x - 75$$
$$x^6 - 3x^5 + 4x^4 + 5x^3 - 12x^2 + 13x - 5$$
$$x^6 - x^5 - 9x^4 - 30x^3 - 25x^2 - 29x - 15$$
$$x^6 - 6x^5 - 17x^4 + 112x^3 - 3x^2 - 92x - 30$$
$$x^6 - 11x^5 + 38x^4 - 35x^3 - 25x^2 + 16x - 2$$
$$x^6 - 3x^5 - 14x^4 + 27x^3 + 17x^2 - 22x - 12$$
$$x^6 - 7x^4 - 12x^3 - 34x^2 + 12x + 16$$
$$x^6 + 3x^5 - x^4 - 7x^3 - 38x^2 - 34x - 8$$
$$x^6 + 7x^5 + 11x^4 + 13x^3 + 12x^2 + 36x - 16$$
$$x^6 - 8x^5 + 17x^4 - 16x^3 + 11x^2 + 34x + 6$$
$$x^6 + 8x^5 + 22x^4 + 20x^3 - 10x^2 - 16x + 5$$
$$x^6 + 9x^5 + 12x^4 - 49x^3 - 45x^2 + 120x - 50$$
$$x^6 - 7x^5 + 11x^4 - 24x^3 - 2x^2 - 20x - 40$$
$$x^6 - 2x^5 - 16x^4 + 52x^3 - 57x^2 - 18x + 8$$
$$x^6 - 2x^5 - 19x^4 - 26x^3 + 5x^2 + 130x + 100$$
$$x^6 + 4x^5 - 8x^4 - 12x^3 + 52x^2 - 56x + 16$$
$$x^6 + 3x^5 + 2x^4 - 17x^3 - 54x^2 - 85x - 75$$
$$x^6 - 10x^5 + 16x^4 + 70x^3 - 110x^2 - 100x + 25$$
$$x^6 - 8x^5 + 20x^4 - 22x^3 + 6x^2 + 6x - 9$$
$$x^6 + 7x^5 + 7x^4 - 9x^3 + 34x^2 - 20x - 8$$
$$x^6 + 4x^5 + 6x^4 + 5x^3 - 12x^2 - 26x - 8$$
$$x^6 - 7x^5 + 6x^4 + 45x^3 - 87x^2 + 10x + 40$$
$$x^6 - 3x^5 - 6x^4 - 3x^3 - 57x^2 + 60x - 10$$
$$x^6 + 6x^5 + 13x^4 + 21x^3 - 8x^2 - 15x - 50$$
$$x^6 - 2x^5 + x^4 - 8x^3 - 4x^2 - 48x - 80$$
$$x^6 - 2x^5 + x^4 + 8x^3 + x^2 - 18x + 30$$
$$x^6 + 6x^5 - 11x^4 - 44x^3 + 147x^2 - 132x + 36$$
$$x^6 - 8x^5 + 21x^4 - 18x^3 - 14x^2 + 52x - 24$$
$$x^6 + x^5 - 9x^4 + 9x^3 + 2x^2 - 60x - 16$$
$$x^6 + 3x^5 + 5x^4 + 26x^3 + 13x^2 + 95x + 25$$
$$x^6 + 4x^5 - 16x^4 - 31x^3 + 62x^2 + 22x - 24$$
$$x^6 - 16x^4 + 64x^3 - 137x^2 + 184x - 80$$
$$x^6 - 11x^5 + 29x^4 - 5x^3 + 35x^2 + 175x + 100$$
$$x^6 - x^5 - 5x^4 - 5x^3 - 34x^2 - 4x + 8$$
$$x^6 + 4x^5 + 6x^4 + 4x^3 - x^2 - 24x - 30$$
$$x^6 - 7x^5 + 12x^4 - 26x^3 + 37x^2 + 45x + 10$$
$$x^6 + x^5 - 14x^4 + 5x^3 - x^2 - 94x - 60$$
$$x^6 - 3x^5 - 10x^4 - 31x^3 - 39x^2 - 50x - 30$$
$$x^6 - 2x^5 - 6x^4 + 12x^3 - 19x^2 - 42x + 20$$
$$x^6 - x^4 + 3x^3 - 16x^2 - 15x - 20$$
$$x^6 - 11x^5 + 22x^4 + 69x^3 - 89x^2 - 200x - 80$$
$$x^6 - 4x^5 - 7x^4 + 32x^3 - 68x^2 + 16x + 48$$
$$x^6 + 4x^5 - 8x^4 - 5x^3 - 14x^2 - 26x + 12$$
$$x^6 + 8x^5 + 23x^4 + 30x^3 - 2x^2 - 76x - 40$$
$$x^6 + 3x^5 - 8x^4 - x^3 + 24x^2 - 85x + 75$$

3.3 일계수가 아닌 육차식 1형

$$8x^6 - 16x^4 + 18x^3 + 8x^2 - 18x - 5$$
$$8x^6 + 8x^5 - 30x^4 - 6x^3 + x^2 - 11x + 2$$
$$10x^6 + 5x^5 - 50x^4 - 13x^3 + 53x^2 + 20x - 5$$
$$9x^6 - 9x^5 - 18x^4 - 15x^3 + 23x^2 + 26x + 20$$

$$6x^6 - 4x^5 - 3x^4 - 22x^3 - 23x^2 - 17x - 12$$
$$25x^6 + 15x^5 - 18x^4 + 31x^3 + 10x^2 - 12x + 12$$
$$16x^6 - 4x^5 - 4x^4 + 25x^3 - 5x^2 - x + 5$$
$$20x^6 + 29x^5 + 26x^3 + 18x^2 - 3x + 9$$
$$12x^6 + 4x^5 + 5x^4 + 26x^3 + 3x^2 + 7x + 15$$
$$4x^6 + x^5 - 22x^4 - 23x^3 - 8x^2 + 11x - 12$$
$$8x^6 - 14x^5 - 9x^4 - 9x^3 - 4x^2 + 8$$
$$12x^6 - 5x^5 - 5x^4 + 21x^3 - 4x^2 - 4x + 3$$
$$6x^6 - 23x^5 + 16x^4 - 9x^3 + 21x^2 + 4x + 6$$
$$10x^6 - 29x^5 + 19x^4 - 20x^3 + x^2 - 3x - 2$$
$$4x^6 + 2x^5 + 3x^4 - 16x^3 - 6x^2 - 9x + 12$$
$$6x^6 + 7x^5 + 9x^4 + x^3 - 5x^2 + 14x - 8$$
$$6x^6 - 10x^5 + 2x^4 - 9x^3 + 10x^2 + x + 4$$
$$2x^6 + 4x^5 - 5x^4 - 11x^3 + 4x^2 + 24x - 12$$
$$8x^6 + 26x^5 - x^4 - 17x^3 - 3x^2 + 5x - 6$$
$$8x^6 + 10x^5 - 5x^4 + 20x^3 + 17x^2 - 10x + 20$$
$$4x^6 + 9x^5 - 30x^4 - 18x^3 + 20x^2 + 27x + 9$$
$$4x^6 - 10x^5 + 13x^4 - 19x^3 + 13x^2 - 8x + 3$$
$$3x^6 - 4x^5 + 4x^4 + 12x^3 - 3x^2 + 2x + 1$$
$$12x^6 - 9x^5 - 7x^4 + 21x^3 - 8x^2 - 5x + 6$$
$$8x^6 + 14x^5 + 15x^4 + 24x^3 + 3x^2 + 6x - 10$$
$$12x^6 - 26x^5 + 30x^4 + 21x^3 - 33x^2 + 25x + 20$$
$$12x^6 - 35x^5 + 8x^4 + 39x^3 - 9x^2 - 11x - 10$$
$$2x^6 - 11x^5 + 12x^4 - 5x^3 + 19x^2 - 12x + 5$$
$$3x^6 - x^5 - 26x^4 - 19x^3 - 3x^2 + 4x - 6$$
$$12x^6 + x^5 + 9x^4 - 12x^3 + 6x^2 - 2x - 1$$
$$2x^6 + 4x^5 + 5x^4 + 20x^3 + 4x^2 + 20x + 8$$
$$3x^6 + 11x^5 - 5x^4 - 35x^3 - 11x^2 + 17x + 15$$
$$8x^6 + 10x^5 - 33x^4 - 8x^3 - 8x + 4$$
$$2x^6 + 2x^5 - 9x^4 + 5x^3 + 21x^2 - 10x - 8$$
$$15x^6 - 24x^5 + 32x^4 - 5x^3 - 8x^2 + 19x - 5$$
$$3x^6 + 17x^5 + 14x^4 - 17x^3 - 7x^2 + 10x - 4$$
$$6x^6 + 4x^5 - x^4 - 12x^3 - 9x^2 - 5x - 4$$
$$6x^6 + 9x^4 - 14x^3 + 3x^2 - 13x + 4$$
$$10x^6 - 35x^5 + 17x^4 + 4x^3 - 7x^2 - 5x - 2$$
$$2x^6 - 10x^5 + 7x^4 - x^3 + 7x^2 + 5x - 6$$
$$8x^6 - 10x^5 - 25x^4 - x^3 - 7x^2 + 4x + 6$$
$$2x^6 - 13x^5 + 27x^4 - 27x^3 + 5x^2 + 12x + 2$$
$$15x^6 + 3x^5 - 10x^4 + 5x^3 - 3x^2 - 12x - 4$$
$$12x^6 - 4x^5 + 6x^4 + x^3 - 3x^2 - 13x - 6$$
$$12x^6 - 17x^5 - x^4 + 2x^3 + 4x^2 - 9$$
$$12x^6 - 31x^5 + 30x^4 - 17x^3 - 2x^2 + 8x - 2$$
$$2x^6 + 8x^5 + 10x^4 - 3x^3 - 4x^2 - 20x + 12$$
$$3x^6 - 4x^5 + 7x^4 - 10x^3 + 3x^2 - 6x - 9$$
$$12x^6 - 26x^5 + 23x^4 + 22x^3 - 27x^2 + 8x + 12$$
$$3x^6 - 14x^5 - 23x^4 + 11x^3 - 6x^2 - 17x - 4$$
$$12x^6 - 32x^5 + 45x^4 - 62x^3 + 53x^2 - 32x + 20$$

$$3x^6 - 17x^5 + 4x^4 + 37x^3 + 26x^2 + 12x - 10$$
$$9x^6 + 9x^5 - 22x^4 + 14x^3 + 17x^2 - 18x + 9$$
$$15x^6 - 16x^5 + 7x^4 + x - 1$$
$$15x^6 - 31x^5 - 15x^4 + 5x^3 + 21x^2 + 25x - 10$$
$$16x^6 + 28x^5 + 18x^4 - 9x^3 - 44x^2 + 5x + 10$$
$$16x^6 + 16x^5 - 33x^4 + x^3 - 3x^2 - 7x - 10$$
$$2x^6 - 8x^5 + 2x^4 + 19x^3 - 25x^2 - 10x + 25$$
$$9x^6 - 24x^5 + 36x^4 - 58x^3 + 45x^2 - 33x + 20$$
$$3x^6 - 2x^5 + x^4 - 12x^3 + 33x^2 - 10x - 25$$
$$5x^6 - 7x^5 - 2x^4 - 20x^3 - 2x^2 - 8x + 4$$
$$15x^6 - 8x^5 - 25x^4 + 24x^3 + 4x^2 - 10x + 3$$
$$15x^6 + 20x^5 + 5x^4 - 36x^3 - 8x^2 + 37x - 15$$
$$25x^6 + 10x^5 - 18x^4 - 26x^3 + 9x^2 + 32x - 16$$
$$6x^6 + 25x^5 + 24x^4 - 4x^3 - 6x^2 - 3x - 2$$
$$4x^6 + 19x^5 + 5x^4 + 17x^3 + 9x^2 + 7x - 5$$
$$4x^6 + 8x^5 + 11x^4 - 9x^3 - x^2 + 5x - 2$$
$$15x^6 - 5x^5 + 13x^4 + 4x^3 + 7x^2 - 6x - 20$$
$$25x^6 - 25x^5 + 10x^4 + 5x^3 + 7x^2 - 8x - 4$$
$$4x^6 - 13x^4 + 20x^3 + 3x^2 - 8x + 3$$
$$6x^6 + x^5 - 15x^4 + 18x^2 + 4x - 16$$
$$4x^6 - 6x^5 + 6x^4 + 2x^3 - x^2 + 7x + 3$$
$$15x^6 + 17x^4 - 25x^3 + 39x^2 - 12x - 4$$
$$10x^6 - 8x^5 + 11x^4 + 12x^3 - 5x^2 + 9x + 6$$
$$6x^6 + 15x^5 + 11x^4 + 9x^3 + 2x^2 - 16x - 15$$
$$15x^6 + 21x^5 + 31x^4 - 3x^3 + 2x^2 + 20x - 20$$
$$20x^6 - 23x^5 + 41x^4 + 5x^3 - x^2 + 22x + 8$$
$$5x^6 + 23x^5 - 13x^4 - 2x^3 + 11x^2 - 6x + 6$$
$$12x^6 + 8x^5 - 24x^4 + 35x^3 - 7x^2 - 8x - 1$$
$$15x^6 - 4x^5 + x^4 + 27x^3 - 6x^2 + 5x + 10$$
$$25x^6 - 30x^5 - 10x^4 + 44x^3 - 13x^2 - 15x + 4$$
$$15x^6 - 35x^5 + 25x^4 - 16x^3 - 7x^2 - 21x - 9$$
$$8x^6 - 26x^5 + 15x^4 + 2x^3 - 27x^2 + 8x + 6$$
$$9x^6 + 6x^5 - 8x^4 + 27x^3 - 35x^2 + 15x - 2$$
$$8x^6 + 14x^5 + 5x^4 - 16x^3 - 19x^2 - 6x + 2$$
$$6x^6 + 19x^5 + 3x^4 - 5x^3 + 28x^2 - 14x + 8$$
$$8x^6 + 4x^5 + 8x^3 + 19x^2 + 8x - 12$$
$$10x^6 + 4x^4 + 27x^3 - 3x^2 - 11x - 2$$
$$3x^6 - x^5 - 2x^4 - 3x^3 + 2x^2 - 2x + 2$$
$$10x^6 - 18x^5 + 20x^4 + 23x^3 + 9x^2 + 14x + 5$$
$$5x^6 + 22x^5 + 9x^4 - 10x^3 + 10x^2 - 24x + 9$$
$$4x^6 - 16x^5 + x^4 - 11x^3 + 6x + 8$$
$$16x^6 + 32x^5 + 16x^4 + 32x^3 + 31x^2 + 16$$
$$25x^6 - 15x^4 - 35x^3 + 27x^2 + 20x - 12$$
$$20x^6 + 3x^5 - 54x^4 + x^3 + 46x^2 - 5x - 12$$
$$2x^6 + 14x^5 + 17x^4 - 2x^3 - 10x^2 - 21x - 12$$
$$2x^6 - 11x^5 + 3x^4 + 19x^3 + 28x^2 + 16x + 6$$
$$5x^6 + 12x^5 + 16x^4 + 6x^3 + 8x^2 + 4x - 3$$

$5x^6+x^5+14x^4-17x^3-8x^2+20x-25$

$8x^6+20x^5+12x^4+16x^3+19x^2-3x+9$

$8x^6-4x^5-30x^4-15x^3-7x^2-9x+2$

$10x^6+4x^5-3x^4-25x^3-5x^2-3x+10$

$10x^6+2x^5+3x^4+17x^3+17x-4$

$5x^6-18x^5-30x^4+3x^3-27x^2-13x+20$

$4x^6-2x^5-10x^4+11x^3+13x^2-9x-9$

$8x^6+8x^5+4x^4+13x^3+13x^2-10x-6$

$4x^6-19x^5+4x^4-6x^3-4x^2-8x-16$

$4x^6+14x^5+14x^4+4x^3-9x^2-4x+2$

$4x^6+4x^5-15x^4+22x^3-38x^2+21x-12$

$4x^6+16x^5-5x^4-21x^3+12x^2+5x-3$

$20x^6-5x^5-11x^4-6x^3+2x^2+18x-15$

$10x^6-26x^5+17x^4+40x^3-38x^2-19x+10$

$5x^6-18x^5+14x^4-6x^3+11x^2+10$

$3x^6+8x^5-17x^4+19x^3-38x^2+13x-20$

$9x^6+6x^5-23x^4+10x^3+18x^2-11x-3$

$16x^6+4x^5+6x^4-x^3+5x^2+11x-6$

$15x^6+9x^5+13x^4-14x^3+6x^2+24x-8$

$25x^6-15x^5-15x^4+22x^3-22x^2-x+20$

$20x^6+25x^5-5x^4-24x^3-11x^2+2x+2$

$3x^6-2x^5-7x^4+9x^3-2x^2-2$

3.4 일계수가 아닌 육차식 2형

$10x^6+28x^5+55x^4+92x^3-59x^2+66x-45$

$4x^6+19x^5-11x^4+55x^3-25x^2+46x-40$

$12x^6+35x^5-99x^4+55x^3-10x^2-4x+8$

$15x^6+7x^5+47x^4-76x^3-120x^2-84x-20$

$50x^6+180x^5+345x^4+346x^3+206x^2+73x+10$

$2x^6-13x^5+36x^4-58x^3+38x^2+3x-36$

$30x^6-67x^5+55x^4-71x^3-113x^2+80x+50$

$8x^6-2x^5-46x^4-27x^3-5x^2-13x+10$

$100x^6-145x^5+236x^4-201x^3+186x^2-92x+48$

$10x^6+21x^5+42x^4+33x^3+47x^2+24x-9$

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

$20x^6+16x^5-88x^4-184x^3-109x^2+12x+18$

$12x^6+32x^5+37x^4+16x^3-77x^2-70x+15$

$20x^6-41x^5-130x^4-19x^3+38x^2+15x+12$

$25x^6+20x^5-155x^4-108x^3+158x^2+40x-40$

$45x^6-63x^5+139x^4-105x^3+112x^2-40x+24$

$10x^6-2x^5-61x^4+43x^3-22x^2+10x+4$

$48x^6-20x^5-76x^4+41x^3+16x^2-20x+5$

$9x^6-30x^5-2x^4-45x^3-22x^2-6x-24$

$4x^6-6x^5-4x^4-21x^3+91x^2-93x+20$

$15x^6+5x^5-64x^4+23x^3-59x^2+80x+48$

$10x^6+44x^5+27x^4-9x^3-79x^2-65x-12$

$24x^6-28x^5-26x^4+8x^3+17x^2+10x+2$

$12x^6+14x^5+24x^4+31x^3-23x^2-10x-20$

$12x^6-36x^5+79x^4-102x^3+100x^2-30x+25$

$8x^6-40x^5-2x^4-70x^3-23x^2-25x-10$

$18x^6-21x^5-9x^4+52x^3-45x^2-37x+12$

$15x^6+19x^5+37x^4+23x^3+9x^2+15x-18$

$15x^6-64x^5-5x^4+211x^3-300x^2+255x-100$

$45x^6-132x^5+228x^4-196x^3+20x^2+100x-125$

$16x^6-96x^5+12x^4+16x^3-55x^2+95x+75$

$8x^6+30x^5+34x^4-39x^3-106x^2+30x+25$

$2x^6-2x^5+13x^4-14x^3+32x^2-25x+12$

$15x^6+22x^5+30x^4+36x^3-16x^2-16x-32$

$2x^6+8x^5+7x^4-34x^3-111x^2-144x-80$

$2x^6+3x^5-9x^4-44x^3-76x^2-32x+16$

$75x^6-135x^5-110x^4+198x^3+88x^2-72x-32$

$3x^6+7x^5-11x^4-16x^3+x^2-23x+15$

$4x^6+16x^5+x^4-19x^3+20x^2+10x-4$

$12x^6-2x^5-85x^4+20x^3+75x^2+48x+16$

$5x^6+8x^5-46x^4-4x^3+130x^2+80x+25$

$12x^6+74x^5-7x^4-264x^3+58x^2+151x-60$

$48x^6-60x^5-82x^4-5x^3+55x^2+104x+48$

$30x^6+53x^5-91x^4+94x^3-123x^2-105x+100$

$80x^6-160x^5+64x^4-4x^3+15x^2+9x+1$

$6x^6+x^5-3x^4-5x^3-53x^2-24x+30$

$40x^6-92x^5-126x^4-69x^3+145x^2+235x+75$

$20x^6-36x^5+27x^4-32x^3-13x^2+4x-20$

$8x^6-14x^5+3x^4-3x^3-3x^2+11x+2$

$6x^6+25x^5+27x^4+10x^3-24x^2-40x+16$

$12x^6+19x^5-4x^4-37x^3-80x^2-60x-48$

$20x^6-20x^5-48x^4-2x^3-31x^2+6x+3$

$60x^6+5x^5-152x^4-41x^3+68x^2+8x-8$

$40x^6+82x^5+197x^4+175x^3+228x^2+108x+80$

$8x^6-38x^5+59x^4-26x^3-18x^2+21x-36$

$75x^6+30x^5-95x^4+21x^3-12x^2+3x+2$

$48x^6+32x^5+12x^4+12x^3-71x^2+25x-25$

$125x^6+50x^5+135x^4+70x^3+38x^2+24x+8$

$36x^6-45x^5-15x^4+81x^3-104x^2-28x+80$

$5x^6+5x^5-57x^4-52x^3+12x^2+20x+4$

$20x^6-29x^5-89x^4+67x^3+116x^2-10x-12$

$48x^6-60x^5-50x^4+23x^3+26x^2+19x+6$

$8x^6+12x^5+46x^4+39x^3+41x^2-36x-60$

$15x^6+62x^5+27x^4-70x^3-72x^2-56x+16$

$32x^6+80x^5+78x^4+75x^3-42x^2-80x+32$

$24x^6+58x^5+11x^4-148x^3-273x^2-216x-80$

$10x^6 - 29x^5 - 131x^4 - 30x^3 + 107x^2 + 11x - 10$

$12x^6 - 84x^5 + 77x^4 + 174x^3 - 97x^2 - 162x - 40$

$8x^6 - 2x^5 + 8x^4 + 57x^3 - 121x^2 - 5x + 50$

$100x^6 + 105x^5 - 20x^4 + 57x^3 + 34x^2 - 12x - 24$

$32x^6 + 56x^5 - 20x^4 - 90x^3 - 125x^2 - 29x + 20$

$125x^6 + 50x^5 + 150x^4 + 75x^3 + 100x^2 + 22x + 24$

$9x^6 + 48x^5 + 123x^4 + 200x^3 + 255x^2 + 200x + 125$

$2x^6 + 15x^5 + 51x^4 + 93x^3 + 85x^2 + 21x - 15$

$75x^6 + 110x^5 - 83x^4 + 84x^3 - 54x^2 + 28x - 16$

$6x^6 - 34x^5 + 23x^4 + 113x^3 - 83x^2 - 113x - 20$

$10x^6 - 41x^5 + 8x^4 + 51x^3 + 60x^2 + 50x + 12$

$40x^6 - 10x^5 + 47x^4 - 5x^3 + 37x^2 - 9x + 12$

$60x^6 - 157x^5 + 287x^4 - 328x^3 + 277x^2 - 151x + 60$

$25x^6 + 30x^5 - 77x^4 + 58x^3 - 45x^2 + 10x + 6$

$9x^6 - 9x^5 - 4x^4 + 27x^3 - 83x^2 - 18x + 18$

$6x^6 - 17x^5 - 76x^4 - 7x^3 + 96x^2 + 39x + 4$

$2x^6 - 9x^5 + 3x^4 + 15x^3 - 26x^2 + 6x + 24$

$8x^6 + 30x^5 - 42x^4 - 73x^3 + 132x^2 - 69x + 10$

$50x^6 - 90x^5 - 185x^4 + 151x^3 + 175x^2 - 3x - 18$

$125x^6 + 75x^5 + 70x^4 + 7x^3 - 106x^2 - 5x - 75$

$80x^6 - 40x^5 - 83x^4 - 13x^3 - 8x^2 - 28x - 16$

$3x^6 + 14x^5 - 21x^4 - 104x^3 - 49x^2 + 42x + 10$

$125x^6 - 125x^5 + 35x^4 - 132x^3 - 79x^2 + 25x - 25$

$4x^6 - 4x^5 + 8x^4 - 9x^2 - 11x - 3$

$75x^6 + 70x^5 - 54x^4 - 31x^3 - 50x^2 - 28x + 48$

$80x^6 - 24x^5 - 55x^4 - 178x^3 - 144x^2 - 93x - 36$

$24x^6 - 98x^5 + 21x^4 + 143x^3 + 37x^2 + 21x + 20$

$60x^6 - 63x^5 + 53x^4 - 91x^3 - 21x^2 - 34x - 24$

$48x^6 + 32x^5 - 95x^4 - 153x^3 - 161x^2 - 35x + 12$

$9x^6 + 69x^5 + 162x^4 + 181x^3 + 115x^2 + 36x + 4$

$8x^6 - 10x^5 - 46x^4 - 61x^3 - 42x^2 + 21x + 18$

$20x^6 + 35x^5 + 21x^4 - 113x^3 - 183x^2 - 152x - 48$

$25x^6 + 10x^5 + 60x^4 + 47x^3 - 156x^2 + 28x + 16$

$20x^6 - 63x^5 - 8x^4 + 224x^3 - 106x^2 - 145x + 50$

$9x^6 - 39x^5 - 32x^4 + 147x^3 - 111x^2 - 14x + 30$

$15x^6 + 73x^5 - 58x^4 - 265x^3 + 163x^2 + 112x - 60$

$3x^6 - 3x^5 - x^4 - 61x^3 - 81x^2 - 115x - 50$

$8x^6 + 42x^5 + 31x^4 - 78x^3 - 40x^2 - 24x + 16$

$20x^6 + 93x^5 + 3x^4 + 11x^3 - 29x^2 - 98x + 60$

$125x^6 + 50x^5 - 90x^4 - 70x^3 - 48x^2 - 16x - 5$

$32x^6 - 40x^5 + 36x^4 - 54x^3 + 24x^2 + x - 10$

$60x^6 - 5x^5 - 248x^4 + 34x^3 + 200x^2 - 24x - 32$

$30x^6 - 7x^5 + 84x^4 + 28x^3 + 35x^2 + 56x - 16$

$10x^6 + 25x^5 - 46x^4 + 64x^3 - 141x^2 + 114x - 40$

$6x^6 - 24x^5 - 23x^4 + 110x^3 + 80x^2 - 104x - 80$

$15x^6 - 80x^5 + 7x^4 - 52x^3 - 6x^2 - 36x - 16$

$2x^6 - 16x^5 + 33x^4 - 23x^3 + 12x^2 + 19x + 3$

$9x^6 + 45x^5 + 23x^4 + 67x^3 + 3x^2 + 17x + 4$

$60x^6 - 79x^5 - 62x^4 + 145x^3 - 62x^2 - 34x + 24$

$20x^6 + 11x^5 + 26x^4 + 13x^3 + 7x^2 + 2x + 1$

$9x^6 + 21x^5 - x^3 - 31x^2 - 36x + 20$

$20x^6 - 71x^5 - 86x^4 - 50x^3 - 88x^2 - 91x - 30$

$10x^6 - 13x^5 - 58x^4 + 57x^3 + 40x^2 - 76x + 80$

$16x^6 - 68x^5 + 30x^4 + 41x^3 - 45x^2 + 46x + 40$

4. 칠차식의 인수분해

4.1 일계수 칠차식

$$x^7-2x^6-3x^5-28x^4+7x^3-22x^2+11x+4$$
$$x^7-2x^6-10x^5+32x^4-34x^3-30x^2+55x-100$$
$$x^7-x^6-25x^5+34x^4-93x^3-3x^2+107x+20$$
$$x^7-4x^6+5x^4-x^3+3x^2+24x+12$$
$$x^7-5x^6-9x^5+53x^4+18x^3-106x^2-4x+40$$
$$x^7-4x^6+5x^5-x^4-23x^2-6x+10$$
$$x^7-12x^6+49x^5-74x^4+28x^3-16x^2-4x+8$$
$$x^7+5x^6-16x^5-65x^4+49x^3-4x^2-6x+12$$
$$x^7+6x^6+15x^5+40x^4+39x^3+59x^2+25x+25$$
$$x^7+2x^6-24x^5-103x^4-160x^3+15x^2+225x+125$$
$$x^7-3x^6-32x^5+72x^4+96x^3+36x^2+15x-5$$
$$x^7+x^6-18x^5+50x^4-79x^3-13x^2+44x-10$$
$$x^7+4x^6+11x^5+20x^4+34x^3+52x^2+56x+32$$
$$x^7-6x^6+6x^5+x^4-5x^3+42x^2-42x-45$$
$$x^7-8x^5+9x^4+14x^3-32x^2+30x-24$$
$$x^7-7x^6+9x^5+10x^4+9x^3+9x^2-83x-20$$
$$x^7+3x^6-16x^5-4x^4-46x^3+14x^2+25x+5$$
$$x^7+4x^6-6x^5-11x^4-12x^3-58x^2-50x-8$$
$$x^7+5x^6-x^5-26x^4-64x^3-74x^2+4x+20$$
$$x^7-2x^6-6x^5+7x^4-27x^3-5x^2+56x+48$$
$$x^7+x^6-10x^5+6x^4+4x^3-16x^2+11x-3$$
$$x^7+8x^6+17x^5+25x^4-15x^3-75x^2-100x+125$$
$$x^7+2x^6-4x^5+2x^4-12x^3-12x^2-43x+30$$
$$x^7+5x^6+3x^5-26x^4-37x^3+45x^2+57x-36$$
$$x^7+3x^6-25x^5-42x^4+85x^3+57x^2-79x+12$$
$$x^7+5x^6-14x^5-72x^4-31x^3+52x^2+5x-6$$
$$x^7-5x^6+2x^5-15x^4-27x^3-20x^2-112x-40$$
$$x^7-2x^6-26x^5-x^4+115x^3+60x^2-50x-25$$
$$x^7+3x^6+x^5+4x^4-17x^3+41x^2-37x+20$$
$$x^7-x^6-17x^5-2x^4-21x^3+10x^2-6x+15$$
$$x^7+x^6-19x^5+21x^4+19x^3-89x^2-46x+12$$
$$x^7-x^6-18x^5+x^4-6x^3-11x^2-7x+2$$
$$x^7-9x^6+24x^5-6x^4-51x^3+53x^2-18x+2$$
$$x^7+6x^6-9x^5-80x^4-109x^3+23x^2+33x-15$$
$$x^7-x^6-10x^5-11x^4+26x^3+29x^2-3x-6$$
$$x^7+4x^6-7x^5-12x^4-46x^3-7x^2+107x-20$$
$$x^7+5x^6+9x^5+20x^4-3x^3-2x^2-14x+5$$
$$x^7-4x^6+16x^5-30x^4+51x^3-26x^2+4x+48$$
$$x^7+10x^6+27x^5-8x^4-101x^3-69x^2+33x+9$$
$$x^7-11x^5-29x^4-69x^3-130x^2+55x+75$$
$$x^7+5x^6+x^5+19x^4+4x^3+76x^2-48x-16$$
$$x^7-6x^6-6x^5+57x^4-21x^3-92x^2+30x+25$$
$$x^7-x^6-19x^5+2x^4+49x^3+59x^2+65x+20$$
$$x^7+3x^6+6x^5+7x^4+7x^3+24x^2+12x-20$$
$$x^7+8x^6+8x^5-36x^4-9x^3+85x^2-72x+18$$
$$x^7-4x^6-10x^5+40x^4+x^3-34x^2-16x-2$$
$$x^7-3x^6-10x^5+23x^4+13x^3-10x^2+76x-20$$
$$x^7+7x^6-x^5-31x^4+94x^3-20x^2-34x+8$$
$$x^7+2x^6-3x^5-11x^4-16x^3+9x^2+26x+40$$
$$x^7-8x^6+18x^5-18x^4+9x^3+74x^2-12x+16$$
$$x^7-8x^6+x^5+63x^4+25x^3+11x^2+20x-5$$
$$x^7+6x^6-16x^5-85x^4+80x^3-58x^2+22x+8$$
$$x^7-6x^6+13x^5-22x^4-5x^3+23x^2-59x-15$$
$$x^7+x^6-2x^5-7x^4-10x^3-3x^2-7x-12$$
$$x^7+6x^6-x^5-19x^4+30x^3+125x^2-118x+24$$
$$x^7-15x^5+24x^4-95x^3+115x^2+25x-25$$
$$x^7+5x^6-15x^5-51x^4+33x^3-51x^2+80x-20$$
$$x^7+5x^6+11x^5+7x^4-12x^3-15x^2+12x+45$$
$$x^7+9x^6+24x^5+24x^4-30x^3-68x^2+67x-15$$
$$x^7+3x^6-20x^5-91x^4-143x^3+30x^2+52x+8$$
$$x^7-x^6+2x^5+4x^4-10x^3+22x^2-85x+75$$
$$x^7-3x^6-22x^5+58x^4+58x^3-28x^2-36x-8$$
$$x^7+3x^6-x^5-10x^3+16x-24$$
$$x^7-15x^5-36x^4+5x^3+93x^2+9x-27$$
$$x^7-7x^6+4x^5+30x^4+4x^3-4x^2-11x+3$$
$$x^7-7x^6+20x^5-34x^4+18x^3+57x^2-120x+50$$
$$x^7-x^6-24x^5-31x^4+40x^3+57x^2-x-6$$
$$x^7+2x^6-x^5+10x^4+8x^3-23x^2+43x+20$$

$$x^7+3x^6-13x^5+12x^4+33x^3-155x^2+35x+100$$
$$x^7-3x^6-3x^5+9x^4-8x^3+10x^2+4x-40$$
$$x^7+3x^6-6x^5-19x^4+29x^3+70x^2-132x+48$$
$$x^7-3x^6-21x^5+19x^4+24x^3+57x^2+70x+15$$
$$x^7-9x^6+18x^5+16x^4-26x^3-8x^2-19x-15$$
$$x^7+5x^6+10x^5+9x^4+2x^3+17x^2+17x+20$$
$$x^7+7x^6+x^5-34x^4+27x^3-20x^2-6x+15$$
$$x^7-4x^6-10x^5+4x^4-37x^3+85x^2+76x+20$$
$$x^7+4x^6-9x^5-12x^4+15x^3-36x^2+25x-20$$
$$x^7-7x^6+3x^5+62x^4-95x^3-61x^2+95x+50$$
$$x^7-x^6-22x^5+21x^4+86x^3-159x^2+93x-18$$
$$x^7+4x^6-5x^5-6x^4-9x^3-8x^2+36x-16$$
$$x^7-5x^6-4x^5+42x^3+76x^2+44x+8$$
$$x^7-x^6+6x^5+8x^4-15x^3+68x^2-67x+60$$
$$x^7-x^6-24x^5-x^4+115x^3+172x^2+104x+24$$
$$x^7+2x^6-4x^5-x^4-2x^3-57x^2-15x+60$$
$$x^7+5x^6+15x^5+24x^4+26x^3+3x^2-50$$
$$x^7-5x^6-8x^5+56x^4-50x^3-79x^2+114x-20$$
$$x^7+4x^6-15x^5-45x^4+38x^3-17x^2+4x+2$$
$$x^7-2x^6-12x^5-15x^4-74x^3-108x^2-52x-8$$
$$x^7-x^6-2x^5-10x^4-2x^3+11x^2+30x+18$$
$$x^7-3x^6-22x^5+78x^4-45x^3-8x^2+11x-2$$
$$x^7+2x^6+x^5+11x^4-24x^3+17x^2-48x+20$$
$$x^7+5x^6-4x^5-11x^4-51x^3+6x^2-28x-16$$
$$x^7-2x^6-24x^5+79x^4-149x^3+241x^2-174x+40$$
$$x^7-3x^6-10x^5+24x^4-26x^3+42x^2-x-3$$
$$x^7+10x^6+29x^5+10x^4-66x^3-88x^2+56x+32$$
$$x^7-4x^6-34x^4-15x^3-88x^2+32x+24$$
$$x^7-4x^6+7x^5-11x^4+x^3+40x^2-45x-25$$
$$x^7-9x^6+11x^5+55x^4-38x^3-155x^2-110x-25$$
$$x^7-23x^5+57x^4-35x^3-78x^2+76x-48$$
$$x^7-2x^6-30x^5+44x^4-39x^3-50x+20$$
$$x^7+10x^6+21x^5-50x^4-182x^3-155x^2-15x+10$$
$$x^7-8x^6+23x^5-52x^4+47x^3-16x^2-26x-4$$
$$x^7-5x^5+20x^4-41x^3+16x^2-67x-20$$
$$x^7-7x^6+x^5+29x^4+39x^3+23x^2-6x-8$$
$$x^7+7x^6+6x^5-x^4+62x^3-69x^2+57x-36$$
$$x^7-2x^6-26x^5+34x^4+136x^3+28x^2-81x-36$$
$$x^7-17x^5-4x^4+26x^3-71x^2-55x+50$$
$$x^7+8x^6+15x^5+7x^4-14x^3-133x^2+30x+100$$
$$x^7-x^6+2x^5-6x^4+5x^3+15x^2-60x+36$$
$$x^7-7x^6+19x^5-41x^4+48x^3-58x^2+28x-8$$
$$x^7-6x^6-19x^5+130x^4-48x^3-63x^2+13x+6$$
$$x^7+2x^6-24x^5-32x^4+4x^3-18x^2+x+12$$
$$x^7+9x^6+21x^5-17x^4-100x^3-21x^2+150x-25$$
$$x^7+5x^6+6x^5+4x^4+36x^3+51x^2-38x-20$$
$$x^7+4x^6-24x^5-95x^4-6x^3+140x^2+40x-32$$
$$x^7-3x^6-19x^5+75x^4-66x^3-27x^2-26x-5$$
$$x^7-4x^6-23x^5+58x^4+139x^3+8x^2-29x-6$$
$$x^7-15x^5-9x^4-21x^3-10x^2-5x-1$$
$$x^7-6x^6+5x^5+4x^4-3x^3+11x^2-7x+1$$
$$x^7+6x^6+19x^5+45x^4+58x^3+78x^2-8x-24$$

4.2 일계수가 아닌 칠차식

$$10x^7-41x^6+107x^5-155x^4+104x^3+80x^2-165x+100$$
$$75x^7+15x^6-65x^5-8x^4+35x^3+11x^2-5x-2$$
$$8x^7-46x^6+23x^5+124x^4+35x^3-185x^2-150x-25$$
$$100x^7+75x^6+129x^5-6x^4+70x^3-76x^2-8x-32$$
$$10x^7-60x^6+133x^5-125x^4-17x^3-65x^2+135x+25$$
$$6x^7+13x^6-23x^5-49x^4+11x^3+43x^2+31x-12$$
$$6x^7-2x^6+7x^5-2x^4+17x^3-21x^2+16x-6$$
$$25x^7+55x^6-100x^5-91x^4-50x^3+238x^2-28x-40$$
$$20x^7-9x^6+70x^5-54x^4+32x^3-91x^2+6x-30$$
$$20x^7-2x^6+55x^5-14x^4-12x^3-44x^2+9x-60$$
$$16x^7+20x^6+4x^5-37x^4-42x^3+10x^2+4x+16$$
$$6x^7+23x^6-48x^5-87x^4+70x^3+80x^2-11x-5$$
$$4x^7+6x^6-45x^5-69x^4-41x^3-16x^2+70x+25$$
$$6x^7+37x^6+66x^5+19x^4-54x^3-55x^2-6x+8$$
$$6x^7+28x^6+13x^5-46x^4+6x^3+14x^2-7x+1$$
$$20x^7-72x^6+137x^5-161x^4+133x^3-111x^2+82x-40$$
$$30x^7+99x^6+88x^5-66x^4-141x^3-36x^2+46x+24$$
$$5x^7+22x^6+43x^5+61x^4+23x^3-15x^2-30x-9$$
$$5x^7-12x^6-56x^5+137x^4-67x^3+2x^2+50x-75$$
$$50x^7+95x^6-76x^5-57x^4-20x^3-22x^2+28x+16$$
$$75x^7+230x^6+300x^5+67x^4-228x^3-212x^2+80$$
$$10x^7+18x^6+3x^5+20x^4-30x^3-42x^2+8x-20$$
$$75x^7+65x^6+79x^5+23x^4-8x^3+63x^2-132x+45$$
$$10x^7-31x^6+67x^5-30x^4-48x^3+24x^2-5x-2$$
$$64x^7+16x^6+8x^4-32x^3-99x^2-77x-12$$
$$18x^7+30x^6-67x^5-55x^4-109x^3+27x^2+25x+75$$
$$45x^7-15x^6+2x^5+91x^4-105x^3+10x^2-54x-30$$
$$12x^7-16x^6+11x^5+75x^4-138x^3+193x^2-113x+60$$
$$32x^7-80x^6+10x^5-98x^4-79x^3+7x^2-47x+10$$
$$10x^7-71x^6+148x^5-214x^4+187x^3-102x^2+34x-4$$
$$15x^7+11x^6-98x^5+28x^4+110x^3-162x^2+45x+75$$
$$50x^7+85x^6-24x^5+37x^4-101x^3-64x^2-135x-100$$
$$20x^7-109x^6+98x^5-153x^4+22x^3-82x^2-20x-40$$
$$40x^7+6x^6-97x^5-110x^4+28x^3+103x^2+60x+12$$
$$20x^7+20x^6+100x^5+78x^4+163x^3+82x^2+95x+30$$
$$60x^7+56x^6+11x^5+33x^4+69x^3-51x^2-38x-40$$

$$20x^7 + 40x^6 - 177x^5 + 59x^4 + 38x^3 + 51x^2 + 11x - 6$$
$$40x^7 - 42x^6 - 57x^5 - 45x^4 + 40x^3 + 211x^2 - 35x - 100$$
$$30x^7 + 100x^6 + 99x^5 - 2x^4 - 86x^3 + 63x^2 + 25x - 75$$
$$10x^7 - 35x^6 - 60x^5 + 28x^4 - 3x^3 + 79x^2 + 47x - 12$$
$$20x^7 + 20x^6 - 97x^5 + 98x^4 - 14x^3 - 51x^2 + 39x - 9$$
$$16x^7 + 32x^6 + 32x^5 + 32x^4 - 13x^3 - 8x^2 - 24x + 5$$
$$20x^7 + 30x^6 - 32x^5 - 15x^4 - 8x^3 - 102x^2 - 13x + 12$$
$$24x^7 - 38x^6 - 32x^5 - 12x^4 + 13x^3 - 84x^2 - 35x + 20$$
$$9x^7 - 3x^6 + 16x^5 + 51x^4 + 21x^3 - 62x^2 - 124x - 40$$
$$15x^7 + 65x^6 + 10x^5 - 129x^4 - 54x^3 + 40x^2 + 23x - 6$$
$$48x^7 - 48x^6 - 107x^5 - 51x^4 + 71x^3 + 159x^2 + 100x + 20$$
$$40x^7 + 142x^6 + 227x^5 + 238x^4 + 158x^3 + 88x^2 + 31x + 12$$
$$24x^7 - 58x^6 + 56x^5 + 19x^4 - 6x^3 - 33x^2 + 46x + 24$$
$$6x^7 + 25x^6 + 64x^5 + 114x^4 + 129x^3 + 134x^2 - 4x - 48$$
$$40x^7 + 14x^6 + 93x^5 + 124x^4 - 3x^3 + 103x^2 - 10x - 25$$
$$8x^7 - 22x^6 + 43x^5 - 72x^4 + 73x^3 - 77x^2 + 40x - 25$$
$$100x^7 - 15x^6 + 18x^5 - 105x^4 - 51x^3 - 98x^2 + 25x - 50$$
$$16x^7 + 84x^6 + 6x^5 + 18x^4 + 47x^3 - 65x^2 + 21x - 2$$
$$30x^7 - 65x^6 - 7x^5 - 19x^4 + 8x^3 + 48x^2 - 4x - 12$$
$$12x^7 - 70x^6 + 49x^5 - 110x^4 + 53x^3 - 94x^2 - 28x + 8$$
$$30x^7 - 58x^6 - 9x^5 + 55x^4 - 50x^3 + 35x^2 - 14x + 2$$
$$60x^7 - 63x^6 + 131x^5 - 159x^4 + 131x^3 - 118x^2 + 84x - 24$$
$$9x^7 - 39x^6 + 49x^5 - 117x^4 + 59x^3 - 89x^2 + 3x + 5$$
$$50x^7 - 145x^5 - 8x^3 - 10x^2 + 145x + 25$$
$$48x^7 + 108x^6 + 38x^5 - 65x^4 - 119x^3 - 27x^2 + 21x + 36$$
$$48x^7 + 8x^6 - 65x^5 + 80x^4 - 112x^3 + 65x^2 - 38x - 40$$
$$6x^7 + 15x^6 - 13x^5 - 56x^4 - 60x^3 - 17x^2 + 7x + 6$$
$$20x^7 + 12x^6 + 5x^5 - 60x^4 - 140x^3 - 67x^2 + 10x + 100$$
$$16x^7 - 76x^6 + 116x^5 - 45x^4 + 53x^3 - 101x^2 - 47x - 60$$
$$45x^7 + 111x^6 - 6x^5 - 194x^4 - 164x^3 + 133x^2 + 180x - 100$$
$$75x^7 - 20x^6 + 116x^5 - 20x^4 + 51x^3 - 46x^2 - 20x - 16$$
$$4x^7 - 22x^6 + 12x^5 + 28x^4 - 9x^3 + 56x^2 + 82x + 24$$
$$8x^7 - 38x^6 - 29x^5 + 80x^4 - 113x^3 - 87x^2 + 14x + 5$$
$$36x^7 - 93x^6 + 66x^5 - 26x^4 - 91x^3 + 108x^2 + 92x + 16$$
$$12x^7 - 71x^6 - 5x^5 + 103x^4 + 172x^3 + 129x^2 + 51x + 9$$
$$40x^7 - 58x^6 + 75x^5 - 135x^4 + 86x^3 - 149x^2 + 57x - 60$$
$$5x^7 + 45x^6 + 102x^5 - 22x^4 - 138x^3 + 22x^2 + 45x - 15$$
$$45x^7 - 48x^6 + 59x^5 - 76x^4 + 47x^3 + 64x^2 - 31x + 60$$
$$2x^7 + 8x^6 + 13x^5 + 55x^4 + 59x^3 + 83x^2 + 55x + 25$$
$$4x^7 - x^6 + 11x^5 + 8x^4 + 36x^3 - 51x^2 - 91x - 60$$
$$25x^7 + 130x^6 + 124x^5 + 138x^4 + 98x^3 + 74x^2 + 83x + 30$$
$$30x^7 + 45x^6 - 95x^5 + 91x^4 + 34x^3 - 143x^2 + 66x - 8$$
$$10x^7 - 5x^6 + 24x^5 - 33x^4 - 63x^3 - 51x^2 + 4x + 4$$
$$12x^7 - 30x^6 - 74x^5 - 47x^4 - 55x^3 + 13x^2 - 79x - 20$$
$$75x^7 - 105x^6 - 50x^5 - 26x^4 - 53x^3 - 11x^2 - 8x - 2$$
$$12x^7 + 2x^6 + 42x^5 + 11x^4 + 52x^3 + 42x^2 + 26x + 5$$
$$60x^7 + 48x^6 - 73x^5 - 86x^4 - 99x^3 - 17x^2 + 90x + 45$$
$$80x^7 + 4x^6 + 106x^5 - 61x^4 - 11x^3 - 130x^2 - 52x - 40$$
$$8x^7 - 22x^5 - 36x^4 - 15x^3 + 23x^2 + 37x + 30$$
$$75x^7 + 20x^6 + 95x^5 + 91x^4 + 112x^3 + 81x^2 + 46x + 40$$
$$18x^7 - 29x^5 - 27x^4 - 76x^3 + 84x^2 + 12x - 12$$
$$20x^7 + 94x^6 + 41x^5 - 197x^4 - 106x^3 + 154x^2 + 48x - 45$$
$$20x^7 + 100x^6 + 53x^5 + 45x^4 + 108x^3 - 48x^2 + 36x - 20$$
$$12x^7 + 13x^6 + 37x^5 - 37x^4 - 108x^3 - 196x^2 - 121x - 20$$
$$30x^7 - 75x^6 + 46x^5 - 59x^4 + 100x^3 - 34x^2 + 32$$
$$45x^7 + 153x^6 + 13x^5 - 275x^4 - 32x^3 + 154x^2 - 20x - 8$$
$$60x^7 + 60x^6 + 121x^5 + 45x^4 + 45x^3 - 24x^2 - 9x - 18$$
$$60x^7 - 43x^6 + 20x^5 - 74x^4 - 16x^3 - 30x^2 - 4x - 3$$
$$40x^7 + 24x^6 - 54x^5 - 62x^4 - 35x^3 + 25x^2 + 20x + 12$$
$$18x^7 + 75x^6 + 138x^5 + 97x^4 - 80x^3 - 159x^2 - 88x + 80$$
$$24x^7 + 20x^6 - 102x^5 + 159x^4 - 142x^3 - 24x^2 + 40x - 75$$
$$10x^7 + 35x^6 + 57x^5 + 112x^4 - 77x^3 + 13x^2 + 20x - 100$$
$$75x^7 - 40x^6 - 106x^5 + 191x^4 - 47x^3 - 84x^2 + 110x - 75$$
$$125x^7 + 100x^6 - 305x^5 - 389x^4 + 59x^3 + 430x^2 + 25x - 125$$
$$9x^7 - 45x^6 + 47x^5 - 47x^4 + 89x^3 - 7x^2 + 62x + 12$$
$$24x^7 - 22x^6 - 122x^5 + 254x^4 - 235x^3 + 77x^2 + x - 4$$
$$30x^7 - 47x^6 - 32x^5 + 149x^4 - 108x^3 - 72x^2 + 135x - 45$$
$$5x^7 - 18x^6 - 4x^5 - 54x^4 + 28x^3 - 16x^2 + 45x - 18$$
$$20x^7 + 2x^6 - 81x^5 + 143x^4 - 126x^3 + 77x^2 - 26x + 6$$
$$24x^7 + 42x^6 + 118x^5 + 97x^4 + 142x^3 + 9x^2 + 20x - 60$$
$$6x^7 - 41x^6 + 101x^5 - 108x^4 + 31x^3 + 42x^2 - 30x - 9$$
$$20x^7 - 48x^6 + 32x^5 - 28x^4 + 19x^3 + 18x^2 - 20x + 4$$
$$45x^7 - 69x^6 + 32x^5 + 35x^4 - 68x^3 - 5x^2 - 5x - 100$$
$$6x^7 + 21x^6 + 11x^5 - 50x^4 - 14x^3 + 19x^2 - 35x + 10$$
$$30x^7 - 9x^6 - 121x^5 - 5x^4 + 5x^3 - 34x^2 + 30x + 24$$
$$50x^7 + 20x^6 + 107x^5 - 9x^4 + 44x^3 + 119x^2 - 76x + 60$$
$$5x^7 + 34x^6 + 54x^5 - 40x^4 - 101x^3 - 33x^2 - 14x - 10$$
$$4x^7 + x^6 - 36x^5 + 56x^4 - 19x^3 + 16x^2 - 6x - 60$$
$$2x^7 - 15x^6 + 23x^5 + 50x^4 - 100x^3 - 90x^2 + 125x + 50$$
$$48x^7 - 160x^6 + 244x^5 - 160x^4 - 76x^3 + 203x^2 - 156x + 45$$
$$12x^7 - 43x^6 + 30x^5 + 21x^4 - 72x^3 - 15x^2 + 30x + 10$$
$$10x^7 + 31x^6 + 40x^5 + 24x^4 - 16x^3 + 50x^2 + 20x + 75$$
$$48x^7 + 80x^6 - 3x^5 - 53x^4 + 3x^3 + 8x^2 - 3$$
$$100x^7 + 120x^6 - 63x^5 + 115x^4 + 72x^3 - 102x^2 + 68x - 16$$

II

정답

5. 사차식의 인수분해

5.1 일계수 사차식

$(x^2+2x+5)(x^2-5x+3)$
$(x^2-3x+4)(x^2-2x-2)$
$(x^2+3x-1)(x^2+2x-4)$
$(x^2-2)(x^2-x+4)$
$(x^2+x+3)(x^2-3x-5)$
$(x^2-2x-4)(x^2+4x+1)$
$(x^2+4x+2)(x^2+x-3)$
$(x^2-4x-4)(x^2-2x+5)$
$(x^2+x+5)(x^2-5x+5)$
$(x^2-x+3)(x^2-4x+2)$
$(x^2+x-3)(x^2-5x+2)$
$(x^2-5x-1)(x^2-4x-4)$
$(x^2+3x-3)(x^2+5)$
$(x^2-5x-2)(x^2+3x+4)$
$(x^2-3x-2)(x^2+3x+4)$
$(x^2-x+2)(x^2+5x+1)$
$(x^2+2x+3)(x^2-5x+5)$
$(x^2+3x-2)(x^2-5x-3)$
$(x^2+4x+2)(x^2+x+1)$
$(x^2-5)(x^2+2x+4)$
$(x^2+4x-1)(x^2-2x-2)$
$(x^2+4x+1)(x^2-5x-4)$
$(x^2-2x-5)(x^2+x+4)$
$(x^2+x+3)(x^2-2x-1)$
$(x^2-3x-3)(x^2-2x+3)$
$(x^2+x-4)(x^2+3)$
$(x^2+3x-5)(x^2-4x-3)$
$(x^2-5x+3)(x^2-4x+5)$
$(x^2+2x-2)(x^2-5x+5)$
$(x^2+4x-3)(x^2+5x+5)$
$(x^2+3x-5)(x^2-2x+4)$
$(x^2+5x+5)(x^2-x+3)$
$(x^2+5x-3)(x^2+3x-1)$
$(x^2-3x-5)(x^2-x+5)$
$(x^2-x-5)(x^2-x+5)$
$(x^2-5)(x^2+4x-4)$
$(x^2+x-5)(x^2+x-3)$
$(x^2+3)(x^2-3x-1)$
$(x^2-5x+2)(x^2+x-1)$
$(x^2+5x-2)(x^2+1)$
$(x^2-3)(x^2-2x+4)$
$(x^2-x+4)(x^2+4x-1)$
$(x^2+1)(x^2+4x-3)$
$(x^2+3)(x^2+4x-2)$
$(x^2+5x-4)(x^2+2x+3)$
$(x^2+4x-1)(x^2+5x+3)$
$(x^2+3x+1)(x^2-2x+5)$
$(x^2+5x-3)(x^2+3)$
$(x^2+x-4)(x^2-5x+1)$
$(x^2+x-1)(x^2-5x-1)$
$(x^2-4x+5)(x^2-4x+1)$
$(x^2-5x-2)(x^2-3x+1)$
$(x^2-x-3)(x^2-3x+4)$
$(x^2-x+1)(x^2-2x-1)$
$(x^2+5x-3)(x^2+4x-3)$
$(x^2-4x-1)(x^2-5x-1)$
$(x^2+2)(x^2-2x+4)$
$(x^2+3x+4)(x^2-x-4)$
$(x^2-x-1)(x^2+2x+4)$
$(x^2+5x+1)(x^2-4x-2)$
$(x^2+5x-3)(x^2+5x-4)$
$(x^2+4x+1)(x^2+3x-2)$
$(x^2-3x-2)(x^2-5x+2)$
$(x^2-5x+1)(x^2+5x-5)$
$(x^2-x-3)(x^2-5x-5)$
$(x^2+x-1)(x^2+4x+1)$
$(x^2+3x+4)(x^2+2x+3)$
$(x^2+3x+4)(x^2-3x+3)$
$(x^2+4x-4)(x^2+5x+1)$
$(x^2-3)(x^2-3x-2)$
$(x^2+2x-2)(x^2+2x-5)$
$(x^2-5)(x^2+4x+5)$
$(x^2+4x-1)(x^2+x+1)$
$(x^2-2x+4)(x^2-4x-1)$
$(x^2-5)(x^2-3x-3)$
$(x^2-4x-3)(x^2+4)$
$(x^2+5x+1)(x^2-3x-5)$
$(x^2-3)(x^2-5x-3)$
$(x^2+x-1)(x^2-4x+1)$
$(x^2+4x-1)(x^2+5)$
$(x^2+4x-2)(x^2-2x-5)$
$(x^2+5x-4)(x^2-x-3)$
$(x^2-x+2)(x^2-4x-4)$
$(x^2-x-5)(x^2-2x+4)$
$(x^2-2x+2)(x^2+5x-5)$
$(x^2-4x+1)(x^2-x+2)$
$(x^2-3x+4)(x^2+5x-3)$
$(x^2+x-4)(x^2+5x+3)$
$(x^2-3x-2)(x^2-4x+5)$
$(x^2+2x-5)(x^2+3x-5)$
$(x^2-2x-5)(x^2+2)$
$(x^2-2x+3)(x^2-x-5)$
$(x^2-5x-1)(x^2-5x-1)$
$(x^2+x-3)(x^2-x-3)$
$(x^2-4x-3)(x^2+2x-1)$
$(x^2-3x+4)(x^2+2x-5)$
$(x^2+4x-2)(x^2-5x+5)$
$(x^2-2x-2)(x^2-x+1)$
$(x^2-5x+1)(x^2-4x+1)$
$(x^2+3x-2)(x^2-5x-5)$
$(x^2-5x+2)(x^2-5x-3)$
$(x^2-3x+5)(x^2-x+5)$

$(x^2+4x-3)(x^2-5x-3)$
$(x^2+2)(x^2+3x+4)$
$(x^2+4x-3)(x^2-3x+3)$
$(x^2+x+4)(x^2+4x-1)$
$(x^2-x+1)(x^2+2)$
$(x^2-2x+5)(x^2+2x-2)$
$(x^2-4x-3)(x^2-x+3)$
$(x^2+2x-1)(x^2-5x-4)$
$(x^2-x+4)(x^2-4x-1)$
$(x^2-x-3)(x^2-5x+3)$
$(x^2+3x+5)(x^2+5x+1)$
$(x^2-3x-1)(x^2+2x+5)$
$(x^2-x+3)(x^2-5x+1)$
$(x^2-5x+3)(x^2-x+3)$
$(x^2+2x+3)(x^2+x-3)$
$(x^2+5x+2)(x^2+x-5)$
$(x^2-x-3)(x^2+4)$
$(x^2-2x-5)(x^2+2x+4)$
$(x^2-x-1)(x^2+x+5)$
$(x^2-5x-2)(x^2+x+3)$
$(x^2-5x-4)(x^2-3x-3)$
$(x^2-x-4)(x^2-5x+1)$
$(x^2-x+3)(x^2+5x-2)$
$(x^2-5x-4)(x^2-x-3)$
$(x^2+2x+3)(x^2+5x+5)$
$(x^2-3)(x^2+4x+5)$
$(x^2+5x+1)(x^2-5x-2)$
$(x^2+x-1)(x^2+4x+5)$
$(x^2-2x-1)(x^2-3x+3)$
$(x^2-3x+5)(x^2-3)$
$(x^2+x+1)(x^2+3x-5)$
$(x^2+2x+4)(x^2+5x-5)$
$(x^2-4x+1)(x^2+4x+2)$
$(x^2-x-5)(x^2-3x-2)$
$(x^2+5x-4)(x^2-3x+3)$
$(x^2+3x+1)(x^2+3x+1)$
$(x^2+4x+5)(x^2+5x+1)$
$(x^2+1)(x^2+5x-5)$
$(x^2-3x+3)(x^2-2x+4)$
$(x^2+4x-2)(x^2-3x+1)$
$(x^2-5x+1)(x^2-2x+2)$
$(x^2+5x-2)(x^2+2x-1)$
$(x^2+2x-5)(x^2-2x-4)$
$(x^2-2x-2)(x^2+x+2)$
$(x^2-x-4)(x^2-3x-5)$
$(x^2+x+5)(x^2+5x+3)$
$(x^2+1)(x^2-x+3)$
$(x^2-5x-1)(x^2+5x-5)$
$(x^2-x-3)(x^2-3x-1)$
$(x^2-4x+2)(x^2+4x-3)$
$(x^2+x+4)(x^2+x+5)$
$(x^2+4x-1)(x^2-2x-1)$
$(x^2+5x-1)(x^2-5x-1)$
$(x^2-x-4)(x^2+4x+1)$
$(x^2-3x-5)(x^2+4x+5)$
$(x^2+3x-1)(x^2-x+3)$
$(x^2-3x-2)(x^2+5x-5)$
$(x^2-5x+5)(x^2+5x-1)$
$(x^2-4x-4)(x^2+5)$
$(x^2-x+1)(x^2+5x-2)$
$(x^2+5x-1)(x^2+4x-2)$
$(x^2+2x+3)(x^2-3x-2)$
$(x^2+3x-3)(x^2-5)$
$(x^2+2x-1)(x^2+2x-4)$
$(x^2+5x-5)(x^2+2x-1)$
$(x^2-x+2)(x^2+1)$
$(x^2+3x+3)(x^2-2x-5)$
$(x^2+3x+3)(x^2+2)$
$(x^2+2x+4)(x^2+2)$
$(x^2-5x+5)(x^2-5x-3)$
$(x^2-4x+1)(x^2+3x+3)$
$(x^2-4x-4)(x^2+2x-1)$
$(x^2-3x+5)(x^2-4x-2)$
$(x^2-3x+3)(x^2+3)$
$(x^2-5x+1)(x^2-5)$
$(x^2-2x+5)(x^2+3x-1)$
$(x^2+3x+4)(x^2-x-3)$
$(x^2+5x+3)(x^2-2x+3)$

5.2 일계수가 아닌 사차식

$(2x^2-4x+3)(5x^2+x-5)$
$(3x^2-4x+5)(3x^2+5x+1)$
$(4x^2-5x+5)(5x^2+x-5)$
$(5x^2+2)(3x^2-2x+4)$
$(2x^2-x-4)(x^2-2)$
$(5x^2+x+4)(5x^2+x-3)$
$(2x^2-x+4)(2x^2+x+4)$
$(4x^2+5x+4)(5x^2+2x-2)$
$(4x^2+3x+3)(3x^2-x-1)$
$(x^2-x+5)(2x^2+3x+3)$
$(2x^2-3)(4x^2-3x+2)$
$(3x^2-3x+1)(5x^2-x+3)$
$(3x^2-3x+2)(5x^2-4x+4)$
$(2x^2+1)(5x^2+3x+2)$
$(3x^2+4x-1)(x^2+5x-1)$
$(5x^2-5x+2)(2x^2+4x+3)$
$(5x^2-x-5)(5x^2-5x+4)$
$(5x^2-3x+5)(x^2+3x-5)$
$(3x^2-3x+4)(5x^2+5x+1)$
$(x^2+2x-4)(4x^2-x-2)$
$(4x^2-x+5)(4x^2+x+4)$
$(x^2+3x+5)(4x^2-5x+2)$
$(4x^2-x+4)(5x^2-3x+3)$
$(2x^2-4x+1)(2x^2+x+4)$
$(5x^2-x+4)(2x^2+3)$
$(5x^2-2x+4)(3x^2-5x-5)$
$(5x^2+3x+1)(x^2-3x-2)$
$(5x^2-2x+5)(x^2+4)$
$(5x^2-x+2)(x^2+2x-4)$
$(4x^2-3x-2)(3x^2+2x+3)$
$(5x^2+5x-1)(3x^2+5x-5)$
$(3x^2-4x+2)(5x^2-3x+2)$
$(3x^2+2x-4)(x^2-2x-4)$
$(x^2-2x+3)(5x^2-3)$
$(2x^2-2x-3)(2x^2-5)$
$(3x^2-5x+5)(2x^2+3x-1)$
$(4x^2+5x-2)(x^2+3x+5)$
$(5x^2-x-5)(3x^2+2x+4)$
$(2x^2-3x+2)(2x^2-4x+3)$
$(2x^2+3x+5)(3x^2-5)$
$(3x^2+3x+5)(2x^2-x+1)$
$(3x^2+3x+4)(3x^2-x-3)$
$(4x^2-3x-3)(5x^2-3x-5)$
$(3x^2+3x-5)(x^2-2x-5)$
$(3x^2-2x-4)(5x^2-4x-3)$
$(5x^2+4x+4)(x^2+5x-4)$
$(x^2+3x-2)(2x^2+5x-1)$
$(5x^2-2x-1)(5x^2+3)$
$(2x^2+3x+2)(2x^2+x-2)$
$(5x^2-2x-5)(3x^2+2x+2)$
$(3x^2-1)(5x^2+5x-2)$
$(x^2+x+4)(3x^2+x+3)$
$(x^2+2x+4)(3x^2+1)$
$(4x^2+4x+3)(2x^2-4x+3)$

$(4x^2+2x+1)(3x^2+x+5)$
$(x^2+4x+5)(2x^2-3x-4)$
$(5x^2+2x-4)(3x^2+5x+5)$
$(4x^2-5x+5)(2x^2-5)$
$(3x^2-2x+2)(3x^2+3x-5)$
$(5x^2+x-3)(3x^2-3x+2)$
$(3x^2+4x+2)(4x^2-3x-3)$
$(4x^2-3x-2)(4x^2-2x-5)$
$(x^2-x+3)(2x^2-2x+3)$
$(4x^2-x-2)(3x^2-3x-5)$
$(3x^2+4x+4)(4x^2+3x-4)$
$(3x^2+2x+5)(3x^2-2x+1)$
$(2x^2-4x-3)(2x^2-4x-3)$
$(5x^2+3x-1)(5x^2-5x-3)$
$(x^2-5x+5)(5x^2+2x-1)$
$(3x^2-5x+3)(4x^2+x+4)$
$(2x^2+1)(2x^2+2x+3)$
$(x^2-x+5)(3x^2-x-1)$
$(3x^2-4x+5)(5x^2+3x-5)$
$(5x^2+2x+3)(x^2+x+3)$
$(2x^2+5x+5)(5x^2+5x-3)$
$(x^2-5x-4)(2x^2-2x+1)$
$(4x^2+3x+5)(3x^2+x-3)$
$(4x^2+1)(4x^2+5x-2)$
$(3x^2+2x-3)(3x^2-5x-4)$
$(4x^2+3x-4)(x^2-2x+3)$
$(4x^2+3x-3)(x^2-4x-3)$
$(3x^2-x+2)(x^2+4x+2)$
$(x^2-2x-1)(5x^2+3x+5)$
$(5x^2-3x+3)(2x^2-2x-1)$
$(2x^2+2x+3)(2x^2-x+5)$
$(5x^2+2x+5)(3x^2+3x-2)$
$(5x^2+2x+5)(2x^2-x-2)$
$(4x^2-x-2)(4x^2-3x+5)$
$(5x^2+5x-3)(3x^2-4x+5)$
$(3x^2-4)(3x^2-5x-4)$
$(3x^2+3x-4)(3x^2-x+5)$
$(2x^2-4x-5)(3x^2-4x-1)$
$(2x^2-3x-1)(2x^2-5x+1)$
$(5x^2+x+5)(2x^2+x-2)$
$(x^2+4x-1)(3x^2-4x-1)$
$(x^2+4x-3)(4x^2+5x+2)$
$(5x^2-3x-4)(2x^2-3)$
$(4x^2-2x-5)(3x^2+2x+3)$
$(2x^2-4x-5)(5x^2-4)$
$(5x^2+2x+1)(5x^2-x+1)$
$(3x^2+5x-4)(5x^2+5x+4)$
$(x^2+3x+4)(5x^2-2)$
$(5x^2+x-3)(4x^2-x+5)$
$(x^2-x-3)(2x^2+3)$
$(5x^2-3x-1)(5x^2+2)$
$(3x^2+4x+3)(5x^2+3)$
$(x^2-5x-5)(5x^2+3x+4)$
$(5x^2-2x+3)(5x^2+2x-4)$
$(4x^2-5x-2)(2x^2-x+2)$
$(5x^2+1)(4x^2+3x-3)$
$(3x^2-5x-3)(5x^2-3x-4)$
$(4x^2-5x-3)(3x^2+4x-3)$
$(x^2+2)(5x^2-3x-1)$
$(x^2-5x-3)(3x^2-3x+4)$
$(x^2+2x-1)(5x^2-3x+2)$
$(2x^2-5x+1)(2x^2+3)$
$(x^2+x+2)(5x^2+3)$
$(2x^2-5x-1)(2x^2-2x-3)$
$(4x^2+2x-1)(2x^2-x+1)$
$(3x^2-5x+3)(5x^2+5x-4)$
$(x^2-x+5)(4x^2-3x+2)$
$(3x^2+5x+4)(3x^2-2x+2)$
$(5x^2+x+2)(3x^2-3x-1)$
$(2x^2+4x+5)(5x^2-x+3)$
$(5x^2-3x+3)(3x^2-5x+1)$
$(x^2-5x+1)(5x^2+5x-3)$
$(2x^2-3)(x^2+x+1)$
$(4x^2+2x+3)(2x^2-x+2)$
$(3x^2-3x-4)(x^2-3x-5)$
$(3x^2-x-1)(4x^2+5x+2)$
$(x^2+5)(5x^2-5x+2)$
$(4x^2+3x-2)(5x^2-3x-3)$
$(5x^2-3x+5)(4x^2+3x+5)$
$(2x^2-3x+4)(2x^2+3x+5)$
$(4x^2-3x+4)(3x^2-2x+2)$
$(4x^2+4x+5)(2x^2-x-4)$
$(2x^2-4x+1)(x^2+x-1)$
$(4x^2+3x+1)(4x^2-5x+2)$
$(4x^2-2x-1)(x^2-3x+5)$
$(3x^2-4x-1)(5x^2-3x-5)$
$(3x^2+2x+5)(5x^2-x+2)$
$(4x^2+5x-4)(x^2-5x-2)$
$(4x^2-5x+2)(x^2-2x+2)$
$(x^2+2x+2)(3x^2-x-5)$
$(2x^2-x+4)(2x^2+5x+1)$
$(5x^2-x-3)(4x^2+x+1)$
$(5x^2-x+3)(4x^2-5x+5)$
$(3x^2+4x+4)(x^2-2x-2)$
$(5x^2+5x+1)(3x^2+5x-1)$
$(4x^2+3x+4)(2x^2+3x+3)$
$(5x^2-5x-1)(5x^2+4x+1)$
$(4x^2-3x+4)(3x^2+x+2)$
$(5x^2+2x-1)(3x^2-4x+2)$
$(4x^2-3x-2)(3x^2+x-5)$
$(2x^2+5x+4)(3x^2-5x+5)$
$(2x^2+x-5)(2x^2+3x+2)$
$(4x^2-3x-4)(3x^2-3x-1)$
$(4x^2+5x+3)(5x^2-4x+3)$
$(5x^2-3x+2)(x^2+4x-4)$
$(x^2-4x-2)(5x^2-3x+5)$
$(x^2-3x-1)(5x^2-x-3)$
$(x^2+4x-2)(2x^2-x-4)$
$(4x^2+3x+5)(x^2-x+1)$
$(4x^2+5x+2)(3x^2+2x+4)$
$(5x^2-x-1)(x^2+4x-3)$
$(5x^2+2x-2)(5x^2-2x+1)$
$(2x^2+4x-5)(3x^2-5x+1)$
$(2x^2-4x-1)(x^2+5x+1)$
$(3x^2-4x+2)(2x^2-x+4)$
$(5x^2-x-3)(5x^2-5x+4)$
$(5x^2+5x-3)(x^2+x-3)$
$(4x^2-x+5)(2x^2+3x-3)$
$(5x^2+3x-4)(5x^2+x+4)$
$(3x^2-2x+4)(2x^2-5x+4)$
$(4x^2+5x+4)(5x^2+x+3)$
$(5x^2+4x+5)(2x^2+2x-1)$
$(2x^2-3x+4)(3x^2+3x+2)$
$(4x^2-3x-4)(4x^2+5x+3)$
$(3x^2+5x-1)(3x^2+2x+2)$
$(2x^2-2x-1)(x^2-x+1)$

6. 오차식의 인수분해

6.1 일계수 오차식

$(x^2-5x+2)(x^3+5x^2-4x+4)$
$(x^2+2x+4)(x^3-5x^2+3x-1)$
$(x^2+4x+1)(x^3+4x^2+3x-3)$
$(x^2-5x-3)(x^3+5x^2-x+4)$
$(x^2+x+2)(x^3+4x^2+4x-4)$
$(x^2+x+5)(x^3+4x^2+4x+5)$
$(x^2+5x-3)(x^3+2x+1)$
$(x^2+3x-5)(x^3-2x^2-x-2)$
$(x^2-5x+2)(x^3-4x^2+3x+1)$
$(x^2-3x+5)(x^3+4x^2-4x+4)$
$(x^2+5x-2)(x^3-5x^2-2x-4)$
$(x^2-3x-5)(x^3+4x^2-4x+1)$
$(x^2-3x-1)(x^3-5x^2-4x-1)$
$(x^2-3x+1)(x^3-4x^2-4x-2)$
$(x^2-5x-3)(x^3+3x^2+5x+1)$
$(x^2-5x-1)(x^3-x^2-x-1)$
$(x^2+5x-4)(x^3-x^2-x+5)$
$(x^2-x-3)(x^3-5x^2+x-1)$
$(x^2+4x+1)(x^3+5x^2+3x+4)$
$(x^2-3x+1)(x^3+5x^2-2x+1)$
$(x^2+3x+1)(x^3+4x^2+x-3)$
$(x^2+4x+1)(x^3-3x^2+2x+1)$
$(x^2+4x+1)(x^3+4x^2-2x-1)$
$(x^2-x+5)(x^3+3x-2)$
$(x^2+3x-1)(x^3-4x^2+3x+3)$
$(x^2+3)(x^3+5x^2+x-2)$
$(x^2+2x+2)(x^3+5x-5)$
$(x^2+5x+3)(x^3+2x^2+5x-1)$
$(x^2-2x+4)(x^3-2x^2+x-5)$
$(x^2+3x-1)(x^3+2x^2+3x-5)$
$(x^2+2x-5)(x^3-2x^2+x-3)$
$(x^2+x+1)(x^3+2x^2-4)$
$(x^2-5)(x^3+x^2+4x-4)$
$(x^2-5x-1)(x^3+5x^2-x+3)$
$(x^2+5x+3)(x^3-5x^2-2x+2)$
$(x^2-4x-1)(x^3+3x^2+4x+5)$
$(x^2+4x+5)(x^3-5x^2+2x+4)$
$(x^2-5x-4)(x^3+3x+2)$
$(x^2+3x+5)(x^3-5x^2+2)$
$(x^2-x+2)(x^3+4x+3)$
$(x^2+4x+1)(x^3+3x^2+5x+5)$
$(x^2+2x+4)(x^3+5x^2+x-4)$
$(x^2+5x+1)(x^3+5x^2+4x+1)$
$(x^2-3)(x^3-4x^2+x+3)$
$(x^2-3)(x^3+x^2-3x+2)$
$(x^2+3x+3)(x^3-5x^2+4x-2)$
$(x^2+5x-3)(x^3+x^2-3x+5)$
$(x^2-2x-5)(x^3+4x^2-5x-4)$
$(x^2-2x+5)(x^3-3x^2-3x-1)$
$(x^2-5)(x^3-2x^2-x+5)$
$(x^2-5x-3)(x^3-5x^2-3x-1)$
$(x^2+4x-2)(x^3+2x^2+x+4)$
$(x^2-x+1)(x^3-4x^2-4x-4)$
$(x^2-5x-2)(x^3-3x^2-1)$
$(x^2-x+1)(x^3-4x^2-2x+2)$
$(x^2-x+2)(x^3-2x^2+3x-1)$
$(x^2+1)(x^3-2x^2+5x-3)$
$(x^2-3x+5)(x^3+2x^2-5x-1)$
$(x^2-3x-1)(x^3+4x^2-4x-3)$
$(x^2+3x-1)(x^3-2x^2-3x-5)$
$(x^2-5x-5)(x^3+3x^2-4x-4)$
$(x^2-4x-2)(x^3-x^2-3x+5)$
$(x^2+2x+3)(x^3-4x^2-3x-3)$
$(x^2-5x-5)(x^3+2x^2-4x+3)$
$(x^2-4x-4)(x^3+5x^2+x-5)$
$(x^2-2x+3)(x^3-2x^2+2x-3)$
$(x^2-3x+3)(x^3+5x^2+x+2)$
$(x^2+3)(x^3-2x^2+x+2)$
$(x^2+5x+2)(x^3+2x^2-x+2)$
$(x^2-4x+5)(x^3-x^2+2x-4)$
$(x^2-2x+3)(x^3-2x^2-4x+2)$
$(x^2-5)(x^3+3x+2)$
$(x^2+x+5)(x^3-5x^2+4x+5)$
$(x^2+4x+5)(x^3+5x^2-3x+3)$
$(x^2+5x-4)(x^3+2x+1)$
$(x^2-4x-4)(x^3-5x^2-4x+3)$
$(x^2+x+4)(x^3-3x^2-5)$
$(x^2+3)(x^3-5x^2+2x+1)$
$(x^2-x+5)(x^3+5x^2-1)$
$(x^2+3x+5)(x^3+4x^2+x-3)$
$(x^2+1)(x^3+4x^2+4x-5)$
$(x^2-4x+5)(x^3-4x^2-5x+3)$
$(x^2-4x-2)(x^3-x^2+x-5)$
$(x^2-3x-3)(x^3-3x^2+2x+5)$
$(x^2-4x-4)(x^3-2x^2+5x+5)$
$(x^2+5)(x^3-x^2+4x+5)$
$(x^2-2x-2)(x^3-x^2-2x-3)$
$(x^2-x-5)(x^3+5x^2+3x-5)$
$(x^2-4x-4)(x^3-x^2-5x-4)$
$(x^2-5)(x^3-3)$
$(x^2-5x-2)(x^3-2)$
$(x^2+2x+3)(x^3-x^2-4x-3)$
$(x^2+3x+3)(x^3-x^2-x-1)$
$(x^2+3)(x^3-4x^2-4x-3)$
$(x^2-4x-2)(x^3-x^2-4x-5)$
$(x^2+5x+2)(x^3-x+2)$
$(x^2-x-1)(x^3-x^2+3x+1)$
$(x^2-3x+1)(x^3-5x^2-x-4)$
$(x^2+x-5)(x^3+2x^2+2)$
$(x^2+2x+4)(x^3+x^2+3x+1)$
$(x^2-2x-1)(x^3-x^2-3x-2)$
$(x^2-3x+5)(x^3+4x^2+x+1)$

$(x^2+3x+1)(x^3+5x^2-4x+3)$
$(x^2-2x-2)(x^3+4x^2-5x-3)$
$(x^2-x+3)(x^3-4x^2-5)$
$(x^2+x-1)(x^3-3x^2-2x+3)$
$(x^2-5x+3)(x^3+4x^2-5x+1)$
$(x^2-2x+2)(x^3-3x^2-1)$
$(x^2-5x-4)(x^3-3x^2+4x-3)$
$(x^2+x+2)(x^3+5x^2+5x-4)$
$(x^2+x+1)(x^3+4x^2-2x+3)$
$(x^2-2x+4)(x^3-5x^2+5x-2)$
$(x^2+2x+4)(x^3-5x^2+2x+3)$
$(x^2+3x+5)(x^3-2x^2+x+1)$
$(x^2+5x+3)(x^3+2x^2-5x+4)$
$(x^2-2x+2)(x^3-x^2+2x+2)$
$(x^2-5x+5)(x^3-4x^2+3x-4)$
$(x^2-4x-4)(x^3-2x^2+3x+1)$
$(x^2-5x-4)(x^3-4x^2-4x+5)$
$(x^2+5x+1)(x^3-x^2+5x+4)$
$(x^2+5)(x^3-5x+3)$
$(x^2+5x+3)(x^3+3x^2-x+1)$
$(x^2-4x+2)(x^3-3x^2+1)$
$(x^2-3x+1)(x^3+x^2-5x+2)$
$(x^2-4x+5)(x^3-2x^2-3x+3)$
$(x^2-2x-1)(x^3+x^2-x-2)$
$(x^2-2x+3)(x^3+x^2-4)$
$(x^2-5x-3)(x^3-5x^2-1)$

$(x^2+3x+5)(x^3-2x^2-5)$
$(x^2-3x-1)(x^3+4x^2-5x-4)$
$(x^2+x-5)(x^3-2x^2-5x-5)$
$(x^2-2)(x^3+3x^2+4x-1)$
$(x^2-2x+5)(x^3-2x^2+x-1)$
$(x^2-2x-5)(x^3-4x^2-1)$
$(x^2-x+1)(x^3-2x^2+3x+1)$
$(x^2-5x-5)(x^3-5x-3)$
$(x^2+5x+1)(x^3+5x^2+3x+4)$
$(x^2-2x+5)(x^3-2x^2-3x-4)$
$(x^2+x+3)(x^3+3x^2+x-3)$
$(x^2-4x-2)(x^3+5x+3)$
$(x^2-3)(x^3-3x^2-4x-4)$
$(x^2-4x+1)(x^3+x^2-3x+4)$
$(x^2+4x-1)(x^3+3x^2-4x-3)$
$(x^2-3)(x^3+3x^2+5x-2)$
$(x^2-3x+5)(x^3-3x^2+2x-4)$
$(x^2+5x-2)(x^3-4x^2-2x-2)$
$(x^2+x-4)(x^3-4)$
$(x^2-3x-3)(x^3-4x^2+4x+5)$
$(x^2+3x+1)(x^3-2x^2+5x-1)$
$(x^2+3x+3)(x^3+x^2+x-4)$
$(x^2+4)(x^3-3x^2+5x-4)$
$(x^2-x+5)(x^3+3x^2+3x-1)$
$(x^2+2x-1)(x^3+3x-1)$
$(x^2+5x+2)(x^3-3x^2+3x+5)$

$(x^2-2x-1)(x^3+4x^2+5x-1)$
$(x^2+3x+3)(x^3+3x^2+2x+3)$
$(x^2+2)(x^3+4x^2+x+3)$
$(x^2+x+4)(x^3-5x^2-x+2)$
$(x^2-3x-5)(x^3+5x^2+2x+1)$
$(x^2-3x-5)(x^3-5x^2+3x+5)$
$(x^2-2x-1)(x^3+2x^2+2x+3)$
$(x^2-x-3)(x^3+2x^2-3x-5)$
$(x^2-3x-3)(x^3-4x^2+4x-2)$
$(x^2-x-3)(x^3+2x^2-5x-2)$
$(x^2+4x-1)(x^3-x^2+2x-3)$
$(x^2-5x+5)(x^3+x^2+3x+4)$
$(x^2+4x-4)(x^3+2x^2+4x-4)$
$(x^2-3x+3)(x^3-3x^2-2x-2)$
$(x^2-5x+2)(x^3+4x^2-3x+4)$
$(x^2+3x+4)(x^3-3x^2-3x+2)$
$(x^2-3x-1)(x^3+4x^2+x+5)$
$(x^2+x-3)(x^3+4x^2+2x-5)$
$(x^2-3x-5)(x^3+4x^2-x-5)$
$(x^2+5x-3)(x^3+2x^2+5x-2)$
$(x^2+x+1)(x^3-x^2-x+3)$
$(x^2-2x-2)(x^3-3x+1)$
$(x^2-3x-3)(x^3-x^2-5x-4)$
$(x^2+3x+4)(x^3-x^2-2x+3)$
$(x^2-4x-4)(x^3+3x^2-4x+1)$
$(x^2+3x-1)(x^3-x^2-2x-1)$

6.2 일계수가 아닌 오차식

$(2x^2+2x+3)(x^3+2x^2+3x+1)$
$(3x^2-2x+1)(5x^3+4x^2-3x+5)$
$(3x^2-4x-2)(5x^3+5x^2+4x+1)$
$(4x^2-2x-5)(2x^3-2x^2-4x-5)$
$(5x^2+x+3)(4x^3+x^2-5x+5)$
$(5x^2-5x-3)(4x^3+3x^2+4x-1)$
$(2x^2+2x+5)(2x^3-x^2+5x-3)$
$(2x^2+x+5)(5x^3-5x^2-3x+5)$
$(3x^2-3x-5)(3x^3+4x^2+2x+4)$
$(2x^2+x-2)(x^3+5x^2-5x-2)$
$(4x^2+3x+1)(2x^3+5x^2-x+4)$
$(x^2+x-3)(5x^3-5x^2-3x-2)$
$(2x^2+5x-1)(x^3+x^2+3)$
$(4x^2-3x-4)(4x^3+3x^2+2x-4)$
$(4x^2-5x+4)(4x^3-2x+1)$
$(3x^2-x-1)(2x^3-2x-3)$
$(4x^2+4x+3)(x^3-5x^2-x-5)$
$(3x^2+2x+4)(x^3-3x^2+x-2)$

$(4x^2+3x+3)(x^3+2x^2-4x-4)$
$(2x^2+x-2)(3x^3-2x^2+5x-3)$
$(5x^2+3x-1)(2x^3-3x^2+x-4)$
$(5x^2+2x+3)(2x^3-5x^2+5x-1)$
$(3x^2+4x+5)(4x^3+3x^2-2x-2)$
$(3x^2+3x+1)(x^3-5x^2+3x+5)$
$(4x^2-3x+5)(2x^3+3x^2+5x+3)$
$(3x^2+5x+1)(4x^3+3x^2+4x+4)$
$(4x^2-5)(4x^3-5x^2-2x-5)$
$(4x^2+5x-3)(3x^3+5x-3)$
$(4x^2-5x+2)(2x^3-x^2-4)$
$(3x^2+x-5)(3x^3+5x+5)$
$(3x^2-2)(4x^3+3x^2-4x+1)$
$(x^2+5x+3)(4x^3+5x-1)$
$(5x^2+4x+3)(3x^3+5x^2+5x-4)$
$(3x^2+3x-1)(5x^3+3x^2-x+5)$
$(2x^2-5x+4)(2x^3+5x-2)$
$(3x^2+5x+4)(2x^3+3x^2-5x+1)$

$(4x^2-3)(2x^3-2x^2+x-3)$
$(3x^2+3x+5)(x^3-3x^2+2x-4)$
$(5x^2+4x+5)(3x^3+3x^2+x-2)$
$(x^2+2x-4)(4x^3-x^2-5x+4)$
$(4x^2+4x+3)(5x^3+3x^2-4x+2)$
$(4x^2+3x-5)(5x^3-3x^2+4x-3)$
$(4x^2-x+5)(x^3+x^2-2x-5)$
$(5x^2-2x+4)(x^3-3x^2+2x-1)$
$(5x^2+2x+2)(3x^3+5x^2-1)$
$(4x^2+5x+2)(4x^3-x^2+x-2)$
$(4x^2+2x-1)(4x^3+2x^2-x-4)$
$(4x^2-2x+1)(x^3+4x^2-x-1)$
$(5x^2-2x+1)(4x^3+4x^2-4x+1)$
$(3x^2+x+2)(4x^3+x^2+2x+3)$
$(3x^2-3x-5)(3x^3+2x^2+x+5)$
$(4x^2+x+1)(3x^3+3x^2-4x+5)$
$(5x^2+2x-1)(3x^3+x^2+5x+5)$
$(5x^2+x+3)(4x^3-5x^2-2x-2)$

$(2x^2 - 4x + 3)(2x^3 - 5x^2 - 2x + 3)$

$(5x^2 + 2x - 1)(3x^3 + 4x^2 - 5x - 4)$

$(3x^2 + 5)(3x^3 + x^2 + 4x - 5)$

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

$(3x^2 - 5x - 4)(3x^3 - x^2 + 2x - 5)$

$(4x^2 + x - 2)(x^3 - 2x^2 + 2x - 5)$

$(5x^2 - 5x + 4)(5x^3 - 3x^2 - x + 5)$

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

$(5x^2 - x + 2)(3x^3 + 4x^2 - 4x + 1)$

$(2x^2 - 4x + 1)(5x^3 + x^2 + 5x + 5)$

$(5x^2 - 2)(5x^3 + 5x^2 - 5x - 2)$

$(5x^2 - 3x - 5)(4x^3 - 5x^2 - 5x + 2)$

$(2x^2 - 3x + 3)(3x^3 - x^2 + 5x + 5)$

$(2x^2 + 4x - 3)(3x^3 - x^2 - 3x + 5)$

$(3x^2 - 2x + 3)(3x^3 + 3x^2 - 2x - 5)$

$(3x^2 - 3x + 5)(5x^3 + x^2 - 2x - 3)$

$(3x^2 + 5x - 4)(4x^3 - 2x^2 + 4x - 3)$

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

$(x^2 - x + 4)(4x^3 - 5x - 3)$

$(5x^2 - 3x + 4)(x^3 + 2x^2 + 4)$

$(2x^2 - 5x + 1)(2x^3 + 5x^2 + 2x + 2)$

$(3x^2 - 4x - 1)(4x^3 + x^2 - 5x - 1)$

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

$(3x^2 - 3x - 2)(5x^3 - x^2 + 5x - 5)$

$(2x^2 + 5x + 4)(3x^3 - 4x^2 - 5x + 4)$

$(5x^2 + 4)(2x^3 + 2x^2 - 4x - 3)$

$(2x^2 - 4x - 1)(3x^3 - 5x^2 + 5x + 4)$

$(4x^2 - 2x + 1)(5x^3 - 4x^2 + x + 1)$

$(x^2 - 4x + 1)(5x^3 + 3x^2 - 4x - 1)$

$(x^2 + 2)(5x^3 + 4x^2 + 4x - 3)$

$(3x^2 + 2)(3x^3 + 5x^2 + x + 5)$

$(5x^2 + 5x + 4)(4x^3 + x^2 + 5x - 2)$

$(5x^2 - 3x - 1)(5x^3 + x^2 + x - 2)$

$(x^2 + x - 5)(5x^3 + 5x^2 - 2x + 3)$

$(5x^2 - 2x + 4)(2x^3 - 3x^2 + 3x - 3)$

$(4x^2 - 3x - 5)(5x^3 - 5x^2 + 4x - 2)$

$(x^2 + 2x - 2)(5x^3 + 5x^2 + 5x - 2)$

$(4x^2 + 5)(2x^3 + 4x^2 + 1)$

$(x^2 - x + 5)(3x^3 - 5x^2 + 5x + 3)$

$(5x^2 + 4x - 3)(5x^3 - x^2 - 3x - 4)$

$(2x^2 - 3x + 3)(5x^3 + 4x^2 + 2x - 5)$

$(5x^2 + 4)(2x^3 - 5x^2 + x + 5)$

$(3x^2 + 1)(4x^3 - 4x^2 + 5x + 2)$

$(5x^2 + 3x + 3)(5x^3 - 4x - 3)$

$(4x^2 - x + 3)(5x^3 - 5x^2 + 3x + 2)$

$(4x^2 - 3x + 4)(2x^3 + 3x^2 - 5x - 5)$

$(3x^2 + 5)(3x^3 + 2x^2 + 5x + 2)$

$(x^2 - 2x + 3)(5x^3 + 4x^2 + 2)$

$(x^2 + x + 4)(2x^3 + 4x^2 - x + 5)$

$(5x^2 - 5x + 3)(3x^3 + 5x^2 - x - 1)$

$(5x^2 - 4x + 1)(4x^3 - 4x^2 + 3x - 2)$

$(5x^2 - x - 1)(3x^3 + 3x^2 - 2x + 4)$

$(x^2 + x + 1)(5x^3 - x^2 + x - 1)$

$(5x^2 - 2)(4x^3 + 5x^2 - 4)$

$(5x^2 - 2x + 4)(x^3 - x^2 - 5x - 2)$

$(5x^2 + x - 2)(3x^3 + 5x^2 - 4x + 3)$

$(2x^2 - x - 5)(x^3 - x^2 - 3x - 3)$

$(3x^2 - 2x + 3)(x^3 + 5x^2 - x + 5)$

$(5x^2 - 2x + 4)(4x^3 - x^2 - 1)$

$(2x^2 - 2x - 5)(4x^3 - x - 1)$

$(2x^2 - 1)(5x^3 + 3x^2 - 5x + 3)$

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

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

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

$(5x^2 - 3x + 1)(5x^3 - 2x^2 - 3x + 5)$

$(5x^2 + x - 2)(3x^3 + 4x^2 + 2x - 2)$

$(5x^2 - 3x - 5)(4x^3 + x^2 + 5x + 2)$

$(4x^2 - 4x + 5)(x^3 + 3x^2 - 4x + 4)$

$(2x^2 + 2x - 5)(3x^3 + 3x^2 - 2x - 5)$

$(x^2 - 5x - 1)(5x^3 + 2x^2 + 5x + 4)$

$(5x^2 + 4x - 5)(5x^3 - 2x^2 - 5x + 3)$

$(x^2 - 4x + 5)(3x^3 + x^2 + 2x + 3)$

$(4x^2 - 5)(3x^3 + x + 5)$

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

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

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

$(x^2 - 2x - 4)(4x^3 + 2x^2 + 5x - 3)$

$(3x^2 - 5x - 4)(5x^3 - 3x^2 - 2x + 3)$

$(x^2 + 3x + 3)(3x^3 + x^2 + 3x + 4)$

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

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

$(5x^2 + x + 2)(2x^3 - 2x^2 - 3x - 3)$

$(3x^2 + 5x - 1)(3x^3 + 3x^2 + 3x - 4)$

$(x^2 - 3x - 5)(3x^3 - 5x^2 + 4x - 4)$

$(2x^2 - 4x + 5)(3x^3 - 5x^2 + 3x + 2)$

$(3x^2 + 5x + 5)(4x^3 - 5x^2 + 5x - 3)$

$(x^2 + 2x + 4)(2x^3 - 5x^2 + 2x - 3)$

$(3x^2 + 2)(2x^3 - 5x^2 - 4x - 5)$

$(2x^2 - 5x + 4)(3x^3 - 4x^2 - 5x + 3)$

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

$(x^2 - 5x - 2)(5x^3 + 5x^2 + x + 3)$

$(3x^2 - 4x - 5)(3x^3 + 2x^2 + 2x + 1)$

$(3x^2 + 5x - 1)(5x^3 - 2x^2 + 3x + 5)$

$(2x^2 + 2x + 1)(2x^3 - 4x^2 + 5x - 5)$

$(x^2 - 5x + 5)(5x^3 - 5x^2 - 2x - 5)$

$(5x^2 - x + 1)(4x^3 + 3x^2 - 4x - 4)$

$(4x^2 - 3x - 5)(x^3 + 4x^2 - 2x - 2)$

$(3x^2 - 4x - 1)(5x^3 + x^2 - 4x + 5)$

$(5x^2 + x + 3)(5x^3 - 4x^2 + 5x + 4)$

$(3x^2 - 2x + 1)(5x^3 + 4x^2 + 5x + 5)$

$(2x^2 - x - 2)(2x^3 + 3x^2 + x + 5)$

$(x^2 - 3x + 1)(2x^3 + x^2 + 2x + 5)$

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

$(5x^2 + 2x + 5)(4x^3 - 4x^2 - x - 2)$

$(2x^2 - 3x + 4)(3x^3 + 5x^2 - 2x + 4)$

$(5x^2 - 5x + 4)(5x^3 + 3x^2 - 5x - 1)$

$(x^2 - 2x - 2)(5x^3 + 5x - 2)$

$(4x^2 - x - 1)(5x^3 - x^2 + 3x - 1)$

$(3x^2 - 3x - 1)(3x^3 - 5x^2 - 1)$

$(x^2 - 4x - 4)(3x^3 - x^2 + 5x + 4)$

$(x^2 + 5x - 4)(4x^3 + 4x^2 + x - 3)$

$(5x^2 + x - 5)(2x^3 + 4x^2 + 5x - 1)$

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

$(4x^2 + 5x - 2)(2x^3 - 2x^2 - 3)$

$(5x^2 + 4x + 4)(x^3 + 2x^2 - x + 3)$

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

$(4x^2 + 5x + 3)(4x^3 + 3x^2 + 3x - 5)$

$(x^2 + 5x + 3)(2x^3 - 4x - 3)$

$(2x^2 + x + 5)(3x^3 + 5x^2 + 4x - 3)$

$(3x^2 - 4x - 5)(x^3 + 4x^2 - x + 4)$

$(x^2 - x + 5)(5x^3 - 4x^2 + 1)$

$(5x^2 + 3x + 3)(3x^3 + 4x^2 - 5x - 5)$

$(3x^2 + 4x - 2)(2x^3 + 4x^2 + 5x + 2)$

$(5x^2 - 4x - 5)(4x^3 + x^2 - 3x + 5)$

$(3x^2 + x - 5)(3x^3 + 2x^2 + x - 3)$

$(5x^2 - 2x - 2)(3x^3 + 3x^2 - 3x - 4)$

7. 육차식의 인수분해

7.1 일계수 육차식 1형

$(x^3+3x^2-5x+5)(x^3+3x^2-3x-3)$
$(x^3+2x^2+4x+5)(x^3-3x^2+5x-4)$
$(x^3+x^2+4x-1)(x^3-4x^2-x+5)$
$(x^3-2x^2-4x+1)(x^3-4x^2-4x+4)$
$(x^3-2x^2-x-5)(x^3-2x^2+3x-5)$
$(x^3-4x^2+1)(x^3-5x^2-3x-1)$
$(x^3-3x^2-2x-2)(x^3-3x^2-5x+2)$
$(x^3+4x^2-3x+5)(x^3-2x^2+4)$
$(x^3+5x^2-5x+2)(x^3+5x^2-5x+2)$
$(x^3-3x^2+2x+5)(x^3+4x^2-5x+3)$
$(x^3-x-1)(x^3-x^2-x+3)$
$(x^3+3x-5)(x^3+3x^2+5x-4)$
$(x^3-4x^2-x+3)(x^3+5x^2-4x+1)$
$(x^3+3x^2+x+5)(x^3+x-1)$
$(x^3+4x^2+5x+3)(x^3+4x^2-x-3)$
$(x^3+x+3)(x^3-x^2+4)$
$(x^3+2x^2-3x+3)(x^3-3x^2-4x-1)$
$(x^3+3x^2+5x-3)(x^3-3x^2-4x-5)$
$(x^3-2x^2-5x+4)(x^3-3x^2+5x+4)$
$(x^3-4x^2-2)(x^3+4x-2)$
$(x^3+5x^2-3x+4)(x^3+2x+1)$
$(x^3+4x^2+3x-1)(x^3-5x^2+4x-1)$
$(x^3+5x^2-5x+2)(x^3+3x^2-4x+4)$
$(x^3-x^2+3x+2)(x^3+5x^2+5x-1)$
$(x^3-5x^2+3x+3)(x^3+4x^2-4x+1)$
$(x^3-4x^2+5x+2)(x^3+5x^2+3)$
$(x^3-5x^2-5x-3)(x^3+3x^2-x+1)$
$(x^3-2x^2-5x-3)(x^3+4x^2-2x+1)$
$(x^3-x^2+x+2)(x^3+5x^2+2x-3)$
$(x^3-4x^2+3x-3)(x^3-2x^2+2x+2)$
$(x^3-4x^2-4x-2)(x^3-4x^2+3x-1)$
$(x^3-x^2+5x-4)(x^3-2x^2-4)$
$(x^3+x^2-3x-4)(x^3-4x+2)$
$(x^3-4x^2+5x+2)(x^3-x^2+2x-1)$
$(x^3-2x^2+x+2)(x^3+x^2-3x-1)$
$(x^3-x^2-3x+5)(x^3+5x^2-4x-1)$
$(x^3-4x^2+4x-2)(x^3-4x^2-4x-2)$
$(x^3-3x^2+5x+2)(x^3+4x^2-5x-3)$
$(x^3+x^2+3x+4)(x^3-2x^2-3x+1)$
$(x^3-x^2-2x+3)(x^3+5x^2+2x-3)$
$(x^3+x^2+x+5)(x^3+x^2+x+4)$
$(x^3+5x^2+3x+4)(x^3-4x^2-x-4)$
$(x^3+2x-5)(x^3+5x^2-x-2)$
$(x^3-5x^2-x-1)(x^3+4x^2-x-3)$
$(x^3-3x^2+5x-4)(x^3+4x^2-5x+3)$
$(x^3+x^2-4x-5)(x^3+4x^2-4x+4)$
$(x^3+3x^2-5)(x^3-5x+5)$
$(x^3-4)(x^3-x^2-x-1)$
$(x^3+4x^2+4x+4)(x^3-3x^2+3x+5)$
$(x^3-2x^2+5x+5)(x^3-4x^2-2x-2)$
$(x^3+2x^2+5x-3)(x^3-3x^2-x+5)$
$(x^3+x^2-3x-4)(x^3+x^2-1)$
$(x^3-x^2-2x-5)(x^3-4)$
$(x^3-4x^2-3x+1)(x^3-x^2+x+5)$
$(x^3+4x^2-5x+2)(x^3+5x^2-3)$
$(x^3+x^2+4x-3)(x^3+3x^2-3x+1)$
$(x^3-4x^2+5x+4)(x^3-3x+4)$
$(x^3-x^2+5x+4)(x^3-2x^2-5x+5)$
$(x^3-2x^2-5x+3)(x^3-3x^2-4x+1)$
$(x^3-2x^2-5x+3)(x^3-3x^2+5x-5)$
$(x^3+5x^2+3x+2)(x^3+3x^2+4x-4)$
$(x^3+4x^2-1)(x^3+2x^2+4x-3)$
$(x^3+5x^2+x+2)(x^3-4x^2-3x+3)$
$(x^3+2x^2+3x-1)(x^3-4x^2+x+5)$
$(x^3+3x^2+5x-5)(x^3-2x^2-x+1)$
$(x^3-x^2+2x-3)(x^3-4x^2-3x-4)$
$(x^3+4x^2-4x-2)(x^3-4x^2+4x+4)$
$(x^3-3x+3)(x^3-5x^2-3x-2)$

$(x^3-4x^2-x-2)(x^3+2x^2+3x-5)$
$(x^3-4x^2-x+1)(x^3+4x^2-4x+3)$
$(x^3+5x^2-5x-2)(x^3-2x^2+2x+3)$
$(x^3+3x^2-x-4)(x^3-2x^2+2x-2)$
$(x^3+x^2+3x-2)(x^3+2x^2+5x-4)$
$(x^3-2x^2-5x-4)(x^3-5x^2+2x-2)$
$(x^3+5x^2-3x-4)(x^3+3x^2+4x+5)$
$(x^3+5x^2+2x+3)(x^3-3x^2-5x-5)$
$(x^3-5x^2-2x-2)(x^3-5x^2+4x+5)$
$(x^3+5x^2-2x-2)(x^3-3x^2-4x-1)$
$(x^3-x^2+2x+5)(x^3-2x^2+x-3)$
$(x^3-5)(x^3+4x^2+3x-5)$
$(x^3+4x^2-3x+4)(x^3+x^2-4x-3)$
$(x^3-4x^2-2x-5)(x^3-3x^2-x-5)$
$(x^3+x^2-x-4)(x^3+x^2+2x-3)$
$(x^3+4x^2-2x+3)(x^3-x^2-2x+5)$
$(x^3+x^2+5x-5)(x^3+5x+1)$
$(x^3-5x^2-5x+3)(x^3+3x^2+4x-2)$
$(x^3+3x^2-5x-3)(x^3+4x^2-4x-3)$
$(x^3-2x^2-2x+2)(x^3+3x+1)$
$(x^3-4x^2-4x+5)(x^3+x^2+5x-4)$
$(x^3+5x+4)(x^3-x^2-2x-5)$
$(x^3+5x^2-2x-3)(x^3+3x+1)$
$(x^3-4x^2+x+4)(x^3+3x^2-2x-5)$
$(x^3-x^2-3x+4)(x^3-5x^2+2x-4)$
$(x^3+5x^2-4x-3)(x^3-5x^2-4x+5)$

$(x^3-4x^2+2)(x^3+4x^2-5x+2)$
$(x^3+4x^2+4x-3)(x^3-x^2+4x+1)$
$(x^3+2x^2-4x-4)(x^3+3x^2+2x+2)$
$(x^3+4x^2-5x+1)(x^3-3x^2+4x+1)$
$(x^3+3x^2-5x+2)(x^3+3x^2-2x+5)$
$(x^3-x^2+2x-3)(x^3-x^2+x-4)$
$(x^3-3x^2-x-1)(x^3+2x^2-x+4)$
$(x^3+5x^2-5x-3)(x^3+4x^2-x+5)$
$(x^3+4x^2-5x+3)(x^3-2x^2-5x+5)$
$(x^3+4x^2-5x-3)(x^3+2x^2+x+4)$
$(x^3+2x^2-4x+3)(x^3-2x^2-2x-2)$
$(x^3+2x^2-x+4)(x^3+2x^2-5x-4)$
$(x^3-5x^2+5x+5)(x^3-3x^2-4x-5)$
$(x^3-4x^2+3x+5)(x^3+2x^2-2x+5)$
$(x^3-5x^2+2x-1)(x^3+5x^2-x+5)$
$(x^3-5x^2+2x+1)(x^3+3x^2+5x+2)$
$(x^3-5x^2-4x+3)(x^3+4x^2+5)$
$(x^3+5x^2-5x-4)(x^3+4x-4)$
$(x^3+3x^2-4x-4)(x^3+4x^2-3x-5)$
$(x^3-4x^2+5x-5)(x^3-x^2+4x+2)$
$(x^3-2x^2-3x+1)(x^3+x^2+3x+5)$
$(x^3+2x^2-4x-2)(x^3-5x^2-x-2)$
$(x^3+2x^2+3x-5)(x^3-3x^2+x+4)$
$(x^3-x^2-4x-4)(x^3-2x^2-4x-4)$
$(x^3-x^2+3x+3)(x^3-4x^2+2x-3)$
$(x^3+3x^2-x-4)(x^3+4x^2+x-1)$

7.2 일계수 육차식 2형

$(x^2-2x-5)(x^2-x-4)(x^2+x-4)$
$(x^2+4x-2)(x^2-5x-5)(x^2-5x+5)$
$(x^2-5x+2)(x^2-3)(x^2+x+3)$
$(x^2+2x+2)(x^2+5x-3)(x^2+2x+3)$
$(x^2+2x+4)(x^2-3x+5)(x^2+3x+5)$
$(x^2-2x+3)(x^2+2x+3)(x^2-x+5)$
$(x^2+4x-3)(x^2-2x-2)(x^2+x+2)$
$(x^2-2x-4)(x^2-4x-4)(x^2+4x+1)$
$(x^2-2x+4)(x^2-5x-5)(x^2+x+5)$
$(x^2+4)(x^2-5x+3)(x^2-x-3)$
$(x^2+x+2)(x^2-x-1)(x^2+5x+3)$
$(x^2-3x+1)(x^2-5x-5)(x^2+5)$
$(x^2-2x+5)(x^2+3x-2)(x^2-5x-1)$
$(x^2-2x-1)(x^2+3x-2)(x^2+2x-2)$
$(x^2+5x-5)(x^2+3x-2)(x^2+3x+4)$
$(x^2-2x-2)(x^2+2x-5)(x^2-3x-2)$
$(x^2-5x-2)(x^2-x+3)(x^2+3x+5)$
$(x^2-5)(x^2+3x-3)(x^2-x+1)$

$(x^2-x+5)(x^2+5x-1)(x^2-3x+1)$
$(x^2-2x+4)(x^2-5x-2)(x^2-5x-4)$
$(x^2+5x-5)(x^2+2x+2)(x^2+5x-3)$
$(x^2+x+3)(x^2+3x-3)(x^2+4x+5)$
$(x^2+2x-4)(x^2+3)(x^2-5x+1)$
$(x^2-2)(x^2-x-5)(x^2-2x+2)$
$(x^2+2x+2)(x^2+5)(x^2-2x-4)$
$(x^2-3x-2)(x^2+5x+5)(x^2-4x-1)$
$(x^2+5x+3)(x^2+5x-5)(x^2-3x+3)$
$(x^2-5x+2)(x^2-3x-5)(x^2-5x-5)$
$(x^2-x+1)(x^2+5)(x^2+5x+5)$
$(x^2+2x-1)(x^2+5x-4)(x^2+2x-2)$
$(x^2+4x+5)(x^2-4x-4)(x^2-4x-2)$
$(x^2+3x+5)(x^2+4x-4)(x^2+2x-5)$
$(x^2+4)(x^2-4x+1)(x^2-3x-5)$
$(x^2-2x-4)(x^2-3x-5)(x^2+2x-4)$
$(x^2+x-4)(x^2-3x-3)(x^2+x+4)$
$(x^2+3x-5)(x^2-3)(x^2-3x+4)$

$(x^2-x+4)(x^2-x-1)(x^2-3x+1)$
$(x^2+x+4)(x^2-5x+2)(x^2+3x+1)$
$(x^2+5x+1)(x^2+x-5)(x^2-3x+5)$
$(x^2-3x-5)(x^2+x+5)(x^2+3x+5)$
$(x^2-2x-1)(x^2+x+5)(x^2+2x+5)$
$(x^2-5x-1)(x^2+5x+3)(x^2+x+5)$
$(x^2-2)(x^2-2x+5)(x^2-5x+5)$
$(x^2+2)(x^2+3x-2)(x^2+x-4)$
$(x^2+3x+4)(x^2+3x-2)(x^2+2)$
$(x^2+2x+3)(x^2-5x+2)(x^2-2)$
$(x^2-3x+3)(x^2+x+4)(x^2-5x+2)$
$(x^2-5x-1)(x^2-5x-3)(x^2-3)$
$(x^2+x+3)(x^2-x+3)(x^2+4x+1)$
$(x^2-x+4)(x^2+2x-1)(x^2-4x-2)$
$(x^2+3x-2)(x^2+3x+5)(x^2+2x+3)$
$(x^2+x+5)(x^2-5x-4)(x^2-4x+5)$
$(x^2-5x+1)(x^2-5x-5)(x^2-4x+1)$
$(x^2-2x+4)(x^2-4x+1)(x^2-5x-3)$
$(x^2-3)(x^2+x-3)(x^2-5x-2)$
$(x^2+2x+4)(x^2+3x-1)(x^2-5x-1)$
$(x^2-5x+3)(x^2+5x-3)(x^2+3x+3)$
$(x^2-2x-5)(x^2-3x-2)(x^2+2x-1)$
$(x^2+3x+1)(x^2+2)(x^2-x+4)$
$(x^2-3)(x^2+4)(x^2+2x-4)$
$(x^2-4x+5)(x^2-3x+4)(x^2-4x-1)$
$(x^2-3)(x^2-3)(x^2+x+3)$
$(x^2+x+2)(x^2+5x+3)(x^2+x-4)$
$(x^2-x-4)(x^2-2x+4)(x^2-2x+5)$
$(x^2-4x+1)(x^2+2x+3)(x^2+5x-3)$
$(x^2-5x-2)(x^2-x-4)(x^2+3x+5)$
$(x^2-5x+1)(x^2-5x-3)(x^2+4)$
$(x^2+1)(x^2+x+1)(x^2-3x-1)$
$(x^2-2x+2)(x^2-4x+5)(x^2+3x+3)$
$(x^2+5x-5)(x^2+2)(x^2+2)$
$(x^2+3x-5)(x^2-5x-1)(x^2+5x+1)$
$(x^2-3x+5)(x^2+3x-3)(x^2-x-5)$
$(x^2-x+2)(x^2+4x+1)(x^2+x-4)$
$(x^2+3x+1)(x^2+2x-4)(x^2-2x-4)$
$(x^2-5x+1)(x^2+x+2)(x^2-3x-3)$
$(x^2+5x-5)(x^2+5x-5)(x^2-3)$
$(x^2+x-1)(x^2-x+1)(x^2-3x+5)$
$(x^2-4x-3)(x^2+3x+5)(x^2+1)$
$(x^2-5x-3)(x^2+3x-5)(x^2-4x-2)$
$(x^2-2x-2)(x^2-4x+1)(x^2-5x+1)$
$(x^2-4x-3)(x^2+2x-4)(x^2-x-1)$
$(x^2+x+4)(x^2-3x-2)(x^2+2x-2)$
$(x^2+4x+2)(x^2+x+4)(x^2-2x-1)$
$(x^2+5x-2)(x^2+3x+4)(x^2-x+2)$
$(x^2-x+3)(x^2-2x-2)(x^2-5x-1)$
$(x^2+4x+5)(x^2+x-1)(x^2+3x-1)$
$(x^2+2x-2)(x^2+2x-5)(x^2+5x-5)$
$(x^2-2x+4)(x^2-5x-5)(x^2+2)$
$(x^2-4x+1)(x^2+5x+2)(x^2-3x+4)$
$(x^2-5x-5)(x^2+2x+4)(x^2+x-5)$
$(x^2-2x+2)(x^2+4x-2)(x^2+2x-4)$
$(x^2-x-5)(x^2+3x+5)(x^2+x+3)$
$(x^2-5x-5)(x^2-5x+1)(x^2-5)$
$(x^2-4x-3)(x^2-3x+3)(x^2-x+1)$
$(x^2+4x-4)(x^2+4x+1)(x^2-x+2)$
$(x^2+x+4)(x^2-2)(x^2+3x+1)$
$(x^2+x-4)(x^2-3x-2)(x^2-5x+5)$
$(x^2+5)(x^2-5x+1)(x^2+2x-2)$
$(x^2+3x-5)(x^2+x+2)(x^2+2x+5)$
$(x^2-2x+5)(x^2-2x-4)(x^2+2x+4)$
$(x^2-3x+5)(x^2-2x+2)(x^2+3x+3)$
$(x^2+4x-4)(x^2+5x-3)(x^2-3x+3)$
$(x^2-4x+2)(x^2-2x-4)(x^2-2x+3)$
$(x^2-x-4)(x^2+4x+1)(x^2-2x+4)$
$(x^2+x+5)(x^2+4x+1)(x^2-2x+5)$
$(x^2+5x-3)(x^2-2x-2)(x^2+x-4)$
$(x^2-x+4)(x^2+5x-4)(x^2-4x+5)$
$(x^2-5x-5)(x^2-x+4)(x^2-5x-5)$
$(x^2-3x-2)(x^2+4)(x^2+2x-1)$
$(x^2+4x+5)(x^2+3)(x^2-2)$
$(x^2+5)(x^2-5x-2)(x^2-2x-1)$
$(x^2-2x+4)(x^2-2x-5)(x^2+5x+3)$
$(x^2-5x-5)(x^2+2x+3)(x^2+2)$
$(x^2-2x+4)(x^2+2x-1)(x^2-2x-5)$
$(x^2-5)(x^2-x+4)(x^2+x+1)$
$(x^2-5x-5)(x^2-x-4)(x^2-5x-4)$
$(x^2-4x-3)(x^2-2x+4)(x^2+2x-4)$
$(x^2+5x-2)(x^2+2)(x^2-x-3)$
$(x^2+2x+5)(x^2+2x-4)(x^2+4x+2)$
$(x^2-x+3)(x^2+3x-5)(x^2+x-5)$

7.3 일계수가 아닌 육차식 1형

$(2x^3-2x+5)(4x^3-4x-1)$
$(2x^3+4x^2-x+2)(4x^3-4x^2-5x+1)$
$(5x^3-5x^2-5x+1)(2x^3+3x^2-5x-5)$
$(3x^3-4x-5)(3x^3-3x^2-2x-4)$

$(2x^3 - 4x^2 + x - 4)(3x^3 + 4x^2 + 5x + 3)$

$(5x^3 + x^2 + 3)(5x^3 + 2x^2 - 4x + 4)$

$(4x^3 - x + 5)(4x^3 - x^2 + 1)$

$(5x^3 + x^2 + 3)(4x^3 + 5x^2 - x + 3)$

$(4x^3 - x + 5)(3x^3 + x^2 + 2x + 3)$

$(4x^3 + 5x^2 - 5x + 3)(x^3 - x^2 - 3x - 4)$

$(4x^3 + 3x^2 - x - 2)(2x^3 - 5x^2 + 2x - 4)$

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

$(2x^3 - 5x^2 - 2x - 2)(3x^3 - 4x^2 + x - 3)$

$(5x^3 - 2x^2 + 2x + 1)(2x^3 - 5x^2 + x - 2)$

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

$(3x^3 + 2x^2 + 5x - 4)(2x^3 + x^2 - x + 2)$

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

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

$(4x^3 + 3x^2 - 2x - 3)(2x^3 + 5x^2 - 3x + 2)$

$(4x^3 + 3x^2 + 5)(2x^3 + x^2 - 2x + 4)$

$(4x^3 - 3x^2 - 5x - 3)(x^3 + 3x^2 - 4x - 3)$

$(4x^3 - 2x^2 + 5x - 3)(x^3 - 2x^2 + x - 1)$

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

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

$(2x^3 + 3x^2 + 2x + 5)(4x^3 + x^2 + 2x - 2)$

$(3x^3 - 5x^2 + 5x + 4)(4x^3 - 2x^2 + 5)$

$(3x^3 - 5x^2 - 2x + 5)(4x^3 - 5x^2 - 3x - 2)$

$(2x^3 - 5x^2 + 3x - 1)(x^3 - 3x^2 - 3x - 5)$

$(x^3 - 2x^2 - 4x - 3)(3x^3 + 5x^2 - 4x + 2)$

$(4x^3 - 5x^2 + 3x - 1)(3x^3 + 4x^2 + 5x + 1)$

$(2x^3 + 5x + 2)(x^3 + 2x^2 + 4)$

$(x^3 + 4x^2 + x - 5)(3x^3 - x^2 - 4x - 3)$

$(2x^3 + 5x^2 + 2)(4x^3 - 5x^2 - 4x + 2)$

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

$(3x^3 - 3x^2 + 4x - 1)(5x^3 - 3x^2 + x + 5)$

$(3x^3 + 2x^2 - 2x + 1)(x^3 + 5x^2 + 2x - 4)$

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

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

$(5x^3 - 5x^2 + x + 2)(2x^3 - 5x^2 - 2x - 1)$

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

$(4x^3 + 5x^2 - 2x - 2)(2x^3 - 5x^2 + x - 3)$

$(2x^3 - 3x^2 + 4x + 1)(x^3 - 5x^2 + 4x + 2)$

$(5x^3 + x^2 - 5x - 2)(3x^3 + x + 2)$

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

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

$(4x^3 - 5x^2 - 2x + 1)(3x^3 - 4x^2 + 4x - 2)$

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

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

$(3x^3 - 5x^2 + 4x + 4)(4x^3 - 2x^2 - x + 3)$

$(3x^3 + x^2 - 3x + 4)(x^3 - 5x^2 - 5x - 1)$

$(4x^3 - 4x^2 + 3x - 5)(3x^3 - 5x^2 + 4x - 4)$

$(3x^3 - 5x^2 - 4x - 5)(x^3 - 4x^2 - 4x + 2)$

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

$(5x^3 - 2x^2 + x - 1)(3x^3 - 2x^2 + 1)$

$(5x^3 - 2x^2 - 5)(3x^3 - 5x^2 - 5x + 2)$

$(4x^3 + 2x^2 + 5x - 5)(4x^3 + 5x^2 - 3x - 2)$

$(4x^3 - x^2 - 3x - 2)(4x^3 + 5x^2 - 4x + 5)$

$(2x^3 - 2x^2 + 5)(x^3 - 3x^2 - 2x + 5)$

$(3x^3 - 3x^2 + 5x - 4)(3x^3 - 5x^2 + 2x - 5)$

$(x^3 + x^2 + x - 5)(3x^3 - 5x^2 + 3x + 5)$

$(x^3 - 2x^2 - 2)(5x^3 + 3x^2 + 4x - 2)$

$(3x^3 - x^2 - 4x + 3)(5x^3 - x^2 - 2x + 1)$

$(5x^3 - 5x + 3)(3x^3 + 4x^2 + 4x - 5)$

$(5x^3 + 4x^2 + 3x - 4)(5x^3 - 2x^2 - 5x + 4)$

$(2x^3 + 5x^2 - x - 2)(3x^3 + 5x^2 + x + 1)$

$(4x^3 + 3x^2 + x - 1)(x^3 + 4x^2 - 2x + 5)$

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

$(5x^3 + x - 5)(3x^3 - x^2 + 2x + 4)$

$(5x^3 - x - 2)(5x^3 - 5x^2 + 3x + 2)$

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

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

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

$(3x^3 + 3x^2 + 4x - 4)(5x^3 - 5x^2 + 4x + 1)$

$(2x^3 + x + 2)(5x^3 - 4x^2 + 3x + 3)$

$(3x^3 + 3x^2 - 2x - 3)(2x^3 + 3x^2 + 2x + 5)$

$(5x^3 + 2x^2 + 4)(3x^3 + 3x^2 + 5x - 5)$

$(5x^3 - 2x^2 + 5x + 4)(4x^3 - 3x^2 + 3x + 2)$

$(x^3 + 5x^2 + 2)(5x^3 - 2x^2 - 3x + 3)$

$(4x^3 - 4x^2 + 4x + 1)(3x^3 + 5x^2 - 4x - 1)$

$(3x^3 - 2x^2 + x + 2)(5x^3 + 2x^2 + 5)$

$(5x^3 - 5x^2 + x + 4)(5x^3 - x^2 - 4x + 1)$

$(5x^3 - 5x^2 + 5x + 3)(3x^3 - 4x^2 - 2x - 3)$

$(4x^3 - 3x^2 + 4x + 2)(2x^3 - 5x^2 - 2x + 3)$

$(3x^3 - 2x^2 + 5x - 2)(3x^3 + 4x^2 - 5x + 1)$

$(4x^3 + 5x^2 + 4x - 1)(2x^3 + x^2 - 2x - 2)$

$(3x^3 + 5x^2 - 3x + 4)(2x^3 + 3x^2 - 2x + 2)$

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

$(2x^3 - 2x^2 + 4x + 1)(5x^3 + 5x^2 - 3x - 2)$

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

$(2x^3 - 4x^2 + 4x + 5)(5x^3 + x^2 + 2x + 1)$

$(x^3 + 5x^2 + 4x - 3)(5x^3 - 3x^2 + 4x - 3)$

$(4x^3 - 4x^2 + 5x - 4)(x^3 - 3x^2 - 4x - 2)$

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

$(5x^3 - 5x^2 - 2x + 3)(5x^3 + 5x^2 + 4x - 4)$

$(5x^3 - 3x^2 - 5x + 4)(4x^3 + 3x^2 - 5x - 3)$

$(x^3 + 5x^2 - 3x - 4)(2x^3 + 4x^2 + 3x + 3)$

$(2x^3 - 3x^2 - 5x - 3)(x^3 - 4x^2 - 2x - 2)$

$(5x^3 + 2x^2 + 2x + 3)(x^3 + 2x^2 + 2x - 1)$

$$(x^3+3x-5)(5x^3+x^2-x+5)$$
$$(2x^3+3x^2+x+3)(4x^3+4x^2-2x+3)$$
$$(2x^3-3x^2-5x+1)(4x^3+4x^2+x+2)$$
$$(5x^3-3x^2-x-5)(2x^3+2x^2+x-2)$$
$$(5x^3+x^2+4x-1)(2x^3-x+4)$$
$$(5x^3+2x^2+3x+5)(x^3-4x^2-5x+4)$$
$$(4x^3+2x^2-4x-3)(x^3-x^2-x+3)$$
$$(2x^3+3x^2-2)(4x^3-2x^2+5x+3)$$
$$(x^3-4x^2-2x-4)(4x^3-3x^2+4)$$
$$(2x^3+5x^2-2)(2x^3+2x^2+2x-1)$$
$$(2x^3+5x^2-3x+3)(2x^3-3x^2+3x-4)$$
$$(x^3+4x^2-1)(4x^3-5x+3)$$
$$(5x^3+x-5)(4x^3-x^2-3x+3)$$
$$(5x^3-3x^2-5x+2)(2x^3-4x^2+3x+5)$$
$$(5x^3-3x^2-5x-5)(x^3-3x^2+2x-2)$$
$$(x^3+4x^2-x+4)(3x^3-4x^2+2x-5)$$
$$(3x^3-2x^2-x+3)(3x^3+4x^2-4x-1)$$
$$(4x^3-x^2-x+3)(4x^3+2x^2+3x-2)$$
$$(5x^3-2x^2-2x+4)(3x^3+3x^2+5x-2)$$
$$(5x^3-5x^2-4x+5)(5x^3+2x^2+3x+4)$$
$$(4x^3+x^2-2x-2)(5x^3+5x^2-1)$$
$$(x^3-2x+2)(3x^3-2x^2-x-1)$$

7.4 일계수가 아닌 육차식 2형

$$(x^2+x+5)(2x^2+4x-3)(5x^2-x+3)$$
$$(x^2-x+2)(4x^2+3x+5)(x^2+5x-4)$$
$$(4x^2-3x-2)(x^2+4x-4)(3x^2-x+1)$$
$$(x^2+x+5)(3x^2-4x-2)(5x^2+4x+2)$$
$$(5x^2+3x+2)(5x^2+5x+1)(2x^2+4x+5)$$
$$(x^2-2x+3)(x^2-2x+3)(2x^2-5x-4)$$
$$(5x^2-2x-2)(2x^2-x+5)(3x^2-4x-5)$$
$$(4x^2+3x-2)(2x^2+1)(x^2-x-5)$$
$$(5x^2-3x+4)(5x^2+2x+4)(4x^2-5x+3)$$
$$(2x^2-x+3)(5x^2+3x-1)(x^2+2x+3)$$
$$(x^2+1)(2x^2+3x-3)(x^2+x+1)$$
$$(5x^2+4x-2)(2x^2+4x+3)(2x^2-4x-3)$$
$$(x^2+x+3)(4x^2-5)(3x^2+5x-1)$$
$$(5x^2+x+1)(x^2-3x-3)(4x^2+3x-4)$$
$$(5x^2+4x-4)(x^2-5)(5x^2-2)$$
$$(3x^2-x+2)(3x^2-2x+3)(5x^2-2x+4)$$
$$(x^2+2x-2)(5x^2-x+2)(2x^2-4x-1)$$
$$(4x^2-3x+1)(4x^2-5)(3x^2+x-1)$$
$$(3x^2-2x+2)(x^2-3x-3)(3x^2+x+4)$$
$$(x^2+3x+5)(2x^2-5x+4)(2x^2-4x+1)$$
$$(3x^2+x+4)(5x^2-5x-3)(x^2+x-4)$$
$$(2x^2+2x+3)(5x^2-3x-4)(x^2+4x+1)$$
$$(2x^2-2x-1)(4x^2+2x+1)(3x^2-2x-2)$$
$$(2x^2+5)(3x^2+2x-4)(2x^2+x+1)$$
$$(2x^2-5x+5)(3x^2+1)(2x^2-x+5)$$
$$(x^2-5x-2)(4x^2+5)(2x^2+1)$$
$$(2x^2-3x+4)(3x^2-2x-3)(3x^2+3x-1)$$
$$(x^2+x+2)(5x^2+3x-3)(3x^2-x+3)$$
$$(x^2-5x+5)(5x^2-3x+4)(3x^2+4x-5)$$
$$(3x^2-4x+5)(5x^2-3x-5)(3x^2-3x+5)$$
$$(4x^2-2x+5)(4x^2-2x-3)(x^2-5x-5)$$
$$(4x^2-x-1)(x^2+3x+5)(2x^2+2x-5)$$
$$(x^2+x+4)(2x^2-2x+1)(x^2-x+3)$$
$$(5x^2+4x+4)(x^2+2)(3x^2+2x-4)$$
$$(x^2+3x+4)(2x^2+4x+5)(x^2-x-4)$$
$$(x^2+2x+4)(x^2-2x-4)(2x^2+3x-1)$$
$$(5x^2-4x-4)(5x^2-5x-4)(3x^2-2)$$
$$(x^2+x-5)(3x^2+4x-3)(x^2+1)$$
$$(2x^2-3x+2)(x^2+4x+2)(2x^2+3x-1)$$
$$(4x^2+2x+1)(3x^2-5x-4)(x^2+x-4)$$
$$(x^2-4x+5)(5x^2+3x+1)(x^2+5x+5)$$
$$(4x^2-2x-5)(3x^2+5x-4)(x^2+5x-3)$$
$$(4x^2-3x-4)(3x^2-3x-4)(4x^2+2x+3)$$
$$(3x^2-x+5)(2x^2+5x-4)(5x^2-2x-5)$$
$$(5x^2-5x-1)(4x^2+1)(4x^2-4x-1)$$
$$(x^2+3)(2x^2-x-5)(3x^2+2x-2)$$
$$(4x^2+4x+5)(2x^2-5x-5)(5x^2-4x-3)$$
$$(5x^2-4x+4)(4x^2-4x-5)(x^2+1)$$
$$(2x^2-x-2)(4x^2-5x-1)(x^2+1)$$
$$(3x^2+2x-4)(2x^2+5x-2)(x^2+x+2)$$
$$(3x^2+4x+4)(4x^2+x+4)(x^2-3)$$
$$(2x^2+2x-1)(2x^2-4x-1)(5x^2+3)$$
$$(3x^2-2x-4)(5x^2-1)(4x^2+3x-2)$$
$$(4x^2-x+4)(5x^2+4x+4)(2x^2+3x+5)$$
$$(x^2-3x+3)(2x^2-3x-4)(4x^2-x+3)$$
$$(5x^2-3x-1)(5x^2+1)(3x^2+3x-2)$$
$$(3x^2-x+1)(4x^2+2x-5)(4x^2+2x+5)$$
$$(5x^2+4x+1)(5x^2+4)(5x^2-2x+2)$$
$$(3x^2-4)(3x^2-3x+5)(4x^2-x-4)$$
$$(x^2-3x-1)(x^2+4x+2)(5x^2-2)$$
$$(x^2-x-3)(5x^2+4x-2)(4x^2-5x-2)$$
$$(3x^2-3x-2)(4x^2+x+1)(4x^2-2x-3)$$
$$(x^2+4)(2x^2+3x+5)(4x^2-3)$$
$$(x^2+2x-4)(3x^2+4x-1)(5x^2+4x+4)$$
$$(4x^2+5x-4)(2x^2+x+4)(4x^2+3x-2)$$
$$(4x^2+5x+4)(3x^2+5x+4)(2x^2-x-5)$$

$$(2x^2+3x-1)(5x^2+3x-5)(x^2-5x-2)$$
$$(x^2-5x-2)(3x^2-3x-4)(4x^2-4x-5)$$
$$(x^2-x+5)(2x^2+2x-5)(4x^2-x-2)$$
$$(4x^2-3x+3)(5x^2+5x+2)(5x^2+4x-4)$$
$$(4x^2-3x-4)(2x^2+3x-1)(4x^2+4x+5)$$
$$(5x^2+5x+3)(5x^2-3x+4)(5x^2+2)$$
$$(3x^2+5)(3x^2+4x+5)(x^2+4x+5)$$
$$(x^2+3x+3)(2x^2+3x-1)(x^2+3x+5)$$
$$(5x^2+2x+2)(3x^2+5x-4)(5x^2-3x+2)$$
$$(x^2-2x-5)(3x^2-5x-4)(2x^2-4x-1)$$
$$(2x^2-5x-2)(5x^2+2x+3)(x^2-2x-2)$$
$$(5x^2+5x+4)(2x^2-x+1)(4x^2-3x+3)$$
$$(4x^2-3x+5)(5x^2-x+4)(3x^2-5x+3)$$
$$(5x^2-x+3)(x^2+2x-2)(5x^2-3x-1)$$
$$(3x^2+4x-2)(x^2-x+3)(3x^2-4x-3)$$
$$(2x^2+x-4)(3x^2+5x+1)(x^2-5x-1)$$
$$(x^2-2)(2x^2-3x+4)(x^2-3x-3)$$
$$(x^2+4x-1)(4x^2-5x+2)(2x^2+2x-5)$$
$$(2x^2-4x-3)(5x^2+5x-2)(5x^2-4x-3)$$
$$(5x^2-x+3)(5x^2+x-5)(5x^2+3x+5)$$
$$(5x^2+5x+2)(4x^2-3x+2)(4x^2-3x-4)$$
$$(x^2+5x+1)(x^2-x-5)(3x^2+2x-2)$$
$$(5x^2-4x-5)(5x^2-2x+1)(5x^2+x+5)$$
$$(x^2-x+3)(2x^2-2x-1)(2x^2+2x+1)$$
$$(5x^2+2x-4)(5x^2+x+4)(3x^2+x-3)$$
$$(4x^2+3x+3)(5x^2+x+3)(4x^2-5x-4)$$
$$(2x^2-5x-4)(3x^2-4x-5)(4x^2-x+1)$$
$$(3x^2-3x-2)(4x^2-x+3)(5x^2+x+4)$$
$$(4x^2+5x-1)(3x^2-4x-3)(4x^2+3x+4)$$
$$(3x^2+5x+1)(x^2+5x+2)(3x^2+3x+2)$$
$$(x^2-3x-2)(2x^2+2x+3)(4x^2+3x-3)$$
$$(x^2+2x+3)(4x^2-5x-4)(5x^2+5x+4)$$
$$(5x^2-3x-1)(x^2+4)(5x^2+5x-4)$$
$$(4x^2+5x-2)(5x^2-2x-5)(x^2-4x+5)$$
$$(3x^2-5x+3)(3x^2+4x-5)(x^2-4x-2)$$
$$(3x^2+5x-3)(x^2+4x-4)(5x^2-4x-5)$$
$$(x^2-3x-2)(3x^2+3x+5)(x^2+x+5)$$
$$(4x^2+3x+2)(2x^2+5x-2)(x^2+2x-4)$$
$$(x^2+4x-3)(5x^2+2x-4)(4x^2+x+5)$$
$$(5x^2-x-5)(5x^2+1)(5x^2+3x+1)$$
$$(4x^2-3x-2)(4x^2+2x+5)(2x^2-2x+1)$$
$$(3x^2-4x-2)(4x^2+5x-4)(5x^2-4)$$
$$(3x^2-x+4)(2x^2-x+4)(5x^2+3x-1)$$
$$(2x^2+x+4)(5x^2-5x+2)(x^2+3x-5)$$
$$(2x^2-4x-5)(x^2-2x-4)(3x^2-4)$$
$$(x^2-5x-2)(5x^2-5x+4)(3x^2+2x+2)$$
$$(x^2-2x-1)(x^2-5x-1)(2x^2-2x+3)$$
$$(3x^2+x+4)(3x^2-x+1)(x^2+5x+1)$$
$$(3x^2-2x-2)(5x^2+3x-4)(4x^2-5x+3)$$
$$(x^2+1)(4x^2+3x+1)(5x^2-x+1)$$
$$(x^2+2x-1)(3x^2-4)(3x^2+x+5)$$
$$(4x^2+5x+2)(5x^2-4x+5)(x^2-4x-3)$$
$$(5x^2-4x+4)(2x^2+x-5)(x^2-x-4)$$
$$(x^2-3x-2)(4x^2-2x-5)(4x^2-3x+4)$$

8. 칠차식의 인수분해

8.1 일계수 칠차식

$$(x^2+1)(x^2-4x-1)(x^3+2x^2+5x-4)$$
$$(x^2+5x+5)(x^2-3x+4)(x^3-4x^2+4x-5)$$
$$(x^2-5x-1)(x^2-x+4)(x^3+5x^2-3x-5)$$
$$(x^2-x+2)(x^2-3x-2)(x^3-3x-3)$$
$$(x^2-2x-5)(x^2+2x-2)(x^3-5x^2+2x+4)$$
$$(x^2-2x-2)(x^2-3x+5)(x^3+x^2+x-1)$$
$$(x^2-4x+2)(x^2-4x-2)(x^3-4x^2+x-2)$$
$$(x^2+3x-3)(x^2-3x-2)(x^3+5x^2-2x+2)$$
$$(x^2+x+5)(x^2+1)(x^3+5x^2+4x+5)$$
$$(x^2+3x+5)(x^2-5x-5)(x^3+4x^2-x-5)$$
$$(x^2-5x-5)(x^2+5x-1)(x^3-3x^2-x-1)$$
$$(x^2-2x-2)(x^2-2x+5)(x^3+5x^2-5x+1)$$
$$(x^2+2x+2)(x^2+2x+4)(x^3+x+4)$$
$$(x^2-4x-3)(x^2+3)(x^3-2x^2-2x+5)$$
$$(x^2-3x+3)(x^2+x-4)(x^3+2x^2+2)$$
$$(x^2-4x-1)(x^2-2x-5)(x^3-x^2+x-4)$$
$$(x^2-3x-1)(x^2+5x-5)(x^3+x^2+3x+1)$$
$$(x^2+5x+1)(x^2-x-4)(x^3+2x+2)$$
$$(x^2-x-5)(x^2+4x-2)(x^3+2x^2+4x+2)$$
$$(x^2+x-4)(x^2-x+4)(x^3-2x^2-5x-3)$$
$$(x^2-x+1)(x^2-x-3)(x^3+3x^2-3x+1)$$
$$(x^2+5x-5)(x^2+x+5)(x^3+2x^2-5)$$
$$(x^2-x+3)(x^2+3x-2)(x^3-2x-5)$$
$$(x^2+x-3)(x^2-3)(x^3+4x^2+5x-4)$$
$$(x^2+5x-4)(x^2+x-3)(x^3-3x^2-5x+1)$$
$$(x^2+3x+1)(x^2+5x-2)(x^3-3x^2-4x+3)$$
$$(x^2-5x-2)(x^2-2x+4)(x^3+2x^2+4x+5)$$
$$(x^2-5)(x^2-5x-5)(x^3+3x^2-x-1)$$
$$(x^2+2x+5)(x^2-x+1)(x^3+2x^2-5x+4)$$
$$(x^2+x+1)(x^2+3x-3)(x^3-5x^2+2x-5)$$
$$(x^2+5x-1)(x^2-2x-4)(x^3-2x^2+2x+3)$$
$$(x^2-5x+1)(x^2-x+1)(x^3+5x^2+5x+2)$$
$$(x^2-4x+2)(x^2-4x+1)(x^3-x^2-3x+1)$$
$$(x^2+4x+5)(x^2-3x-3)(x^3+5x^2-4x+1)$$
$$(x^2-3x-3)(x^2-x-1)(x^3+3x^2+3x-2)$$
$$(x^2+5x-1)(x^2-x-4)(x^3+3x-5)$$
$$(x^2+x+5)(x^2+x+1)(x^3+3x^2-4x+1)$$
$$(x^2-2x+4)(x^2-2x+3)(x^3+5x+4)$$
$$(x^2+5x+1)(x^2-3)(x^3+5x^2+4x-3)$$
$$(x^2-4x-3)(x^2+5)(x^3+4x^2+3x-5)$$
$$(x^2+2x+4)(x^2-2x+4)(x^3+5x^2-3x-1)$$
$$(x^2-2x-1)(x^2+x-5)(x^3-5x^2-3x+5)$$
$$(x^2-2x-1)(x^2+5x+5)(x^3-4x^2-x-4)$$
$$(x^2+x-1)(x^2+2x+5)(x^3+4)$$
$$(x^2+5x-3)(x^2+2x-2)(x^3+x^2-4x+3)$$
$$(x^2-2x-1)(x^2-4x-1)(x^3+2x^2-4x-2)$$
$$(x^2-x-5)(x^2-4x+1)(x^3+2x^2+4)$$
$$(x^2+5x-4)(x^2+4x-1)(x^3-2x^2+2x+2)$$
$$(x^2+x-4)(x^2+x+2)(x^3-2x-5)$$
$$(x^2-2x-4)(x^2-x+4)(x^3-5x^2+x-1)$$
$$(x^2-5x+1)(x^2-5x-5)(x^3+2x^2+1)$$
$$(x^2+5x+1)(x^2+5x-4)(x^3-4x^2+2x-2)$$
$$(x^2-3x-5)(x^2-2x+3)(x^3-x^2+4x+1)$$
$$(x^2-x+1)(x^2-x-3)(x^3+3x^2+5x+4)$$
$$(x^2+5x-3)(x^2-3x+4)(x^3+4x^2+5x-2)$$
$$(x^2-5x+5)(x^2+5)(x^3+5x^2-1)$$
$$(x^2+5x-5)(x^2+3x-1)(x^3-3x^2-4)$$
$$(x^2+3x+5)(x^2+2x+3)(x^3-3x+3)$$
$$(x^2+2x-1)(x^2+5x-3)(x^3+2x^2+4x-5)$$
$$(x^2-5x-1)(x^2+5x+2)(x^3+3x^2+4x-4)$$
$$(x^2+x-3)(x^2-2x+5)(x^3+2x-5)$$
$$(x^2-4x-2)(x^2-3x-2)(x^3+4x^2-2x-2)$$
$$(x^2-2)(x^2+x+3)(x^3+2x^2-4x+4)$$
$$(x^2-4x-3)(x^2+x-3)(x^3+3x^2+4x-3)$$
$$(x^2-4x+1)(x^2+x-1)(x^3-4x^2-4x-3)$$
$$(x^2-x+5)(x^2-4x+2)(x^3-2x^2-x+5)$$
$$(x^2+x-3)(x^2+3x+1)(x^3-5x^2-5x+2)$$
$$(x^2+3x+1)(x^2-x+4)(x^3-3x+5)$$

$$(x^2-2x+5)(x^2-5)(x^3+5x^2-3x-4)$$
$$(x^2-2x-4)(x^2+2)(x^3-x^2-3x+5)$$
$$(x^2+2x-4)(x^2-3x+3)(x^3+4x^2+5x-4)$$
$$(x^2-5x-5)(x^2+4x+1)(x^3-2x^2+x-3)$$
$$(x^2-x-1)(x^2-3x-5)(x^3-5x^2+x-3)$$
$$(x^2+x+1)(x^2+3x+5)(x^3+x^2-3x+4)$$
$$(x^2+3x-3)(x^2-x-1)(x^3+5x^2-2x+5)$$
$$(x^2+4)(x^2+x-5)(x^3-5x^2-4x-1)$$
$$(x^2+1)(x^2-5)(x^3+4x^2-5x+4)$$
$$(x^2-3x-2)(x^2+x-5)(x^3-5x^2+3x+5)$$
$$(x^2+3x-3)(x^2-5x+3)(x^3+x^2-5x+2)$$
$$(x^2+x-1)(x^2+4x-4)(x^3-x^2+x-4)$$
$$(x^2-5x-2)(x^2-2x-2)(x^3+2x^2+4x+2)$$
$$(x^2-x+5)(x^2-x+4)(x^3+x^2-2x+3)$$
$$(x^2-2x-4)(x^2-4x-3)(x^3+5x^2+5x+2)$$
$$(x^2-x+4)(x^2-5)(x^3+3x^2-3)$$
$$(x^2+2x+5)(x^2+2)(x^3+3x^2+2x-5)$$
$$(x^2-5x+1)(x^2+2x-4)(x^3-2x^2-x+5)$$
$$(x^2-4x+2)(x^2+5x+1)(x^3+3x^2-x+1)$$
$$(x^2-5x-2)(x^2+3x+1)(x^3+4x+4)$$
$$(x^2+x+3)(x^2-2x-2)(x^3-x-3)$$
$$(x^2-5x+2)(x^2-3x+1)(x^3+5x^2-1)$$
$$(x^2+2x-5)(x^2+4)(x^3+2x-1)$$
$$(x^2-2x-1)(x^2+2x+4)(x^3+5x^2-3x+4)$$
$$(x^2+5x-4)(x^2-5x+2)(x^3-2x^2+3x-5)$$
$$(x^2-4x-1)(x^2+3x-1)(x^3-2x^2+2x-3)$$
$$(x^2+3x+4)(x^2+4x-4)(x^3+3x^2-4x-2)$$
$$(x^2-5x-2)(x^2+2x+4)(x^3-x^2+5x-3)$$
$$(x^2-2x-1)(x^2+5)(x^3-2x^2-x+5)$$
$$(x^2-2x-5)(x^2-5x-5)(x^3-2x^2-3x-1)$$
$$(x^2-3x+4)(x^2-2x-4)(x^3+5x^2-4x+3)$$
$$(x^2+5x-2)(x^2-2x+2)(x^3-5x^2-5x-5)$$
$$(x^2+5x+2)(x^2+5x-1)(x^3-5x-5)$$
$$(x^2-5x-1)(x^2-2x+2)(x^3-x^2+5x+2)$$
$$(x^2+4x+1)(x^2-2x+5)(x^3-2x^2+x-4)$$
$$(x^2+x+1)(x^2-5x-4)(x^3-3x^2-3x+2)$$
$$(x^2-x+3)(x^2+3x-3)(x^3+5x^2-x+4)$$
$$(x^2+5x+3)(x^2-4x-3)(x^3-3x^2-3x+4)$$
$$(x^2+3x-2)(x^2-3x-5)(x^3-x+5)$$
$$(x^2+x+5)(x^2+2x-4)(x^3+5x^2-3x-5)$$
$$(x^2-2x+3)(x^2-3)(x^3+x^2+4x-4)$$
$$(x^2+2)(x^2-2x+4)(x^3-5x^2+3x-1)$$
$$(x^2-5x+2)(x^2-5x-3)(x^3+4x^2-3x-1)$$
$$(x^2-4x-3)(x^2+x-1)(x^3+5x^2-x+4)$$
$$(x^2+2x-5)(x^2+3x-5)(x^3+4x^2+5x-1)$$
$$(x^2+3x+1)(x^2-2x+4)(x^3+4x^2+3x-5)$$
$$(x^2-4x-4)(x^2+5x-2)(x^3+3x^2-x-4)$$
$$(x^2-4x+5)(x^2+5x+1)(x^3-4x^2-x-1)$$
$$(x^2+4x+1)(x^2-5x-2)(x^3-3x^2-5x+3)$$
$$(x^2+4x+1)(x^2+1)(x^3-4x^2-x-1)$$
$$(x^2-5x+1)(x^2+1)(x^3-x^2-2x+1)$$
$$(x^2+4x+2)(x^2+4)(x^3+2x^2+5x-3)$$

8.2 일계수가 아닌 칠차식

$$(x^2-x+4)(2x^2-5x+5)(5x^3-3x^2-2x+5)$$
$$(3x^2+3x+1)(5x^2-1)(5x^3-4x^2-x+2)$$
$$(4x^2-5x-5)(x^2-4x-1)(2x^3-x^2-5x-5)$$
$$(5x^2-2x+4)(5x^2+2x+2)(4x^3+3x^2+x-4)$$
$$(5x^2-5x-1)(x^2-3x+5)(2x^3-4x^2-5x-5)$$
$$(2x^2+3x-1)(x^2+x-3)(3x^3-x^2-3x-4)$$
$$(x^2+2x+2)(2x^2-2x+3)(3x^3-4x^2+3x-1)$$
$$(x^2+2x-4)(5x^2-4x-2)(5x^3+5x^2+4x-5)$$
$$(x^2+3)(5x^2+4x+5)(4x^3-5x^2+2x-2)$$
$$(5x^2-3x+4)(x^2+3)(4x^3+2x^2-3x-5)$$
$$(2x^2+x-2)(2x^2+3x+4)(4x^3-3x^2-2)$$
$$(2x^2-x-5)(x^2+5x+1)(3x^3-2x^2-3x+1)$$
$$(4x^2+2x+5)(x^2-2x-5)(x^3+3x^2-2x-1)$$
$$(2x^2+3x+2)(x^2+3x-1)(3x^3+5x^2-3x-4)$$
$$(2x^2-1)(x^2+3x-1)(3x^3+5x^2-4x+1)$$
$$(2x^2-3x+4)(2x^2-3x+2)(5x^3-3x^2-x-5)$$
$$(3x^2-2)(2x^2+5x+4)(5x^3+4x^2-2x-3)$$
$$(x^2+3x+1)(x^2+x+3)(5x^3+2x^2-3)$$
$$(5x^2-2x-5)(x^2+2x-5)(x^3-4x^2+2x-3)$$
$$(5x^2-2x-2)(2x^2+3x-4)(5x^3+4x^2+3x+2)$$
$$(3x^2+5x+5)(5x^2+2x-4)(5x^3+5x^2+2x-4)$$
$$(2x^2+2x-5)(x^2+2)(5x^3+4x^2+2)$$
$$(5x^2-3x+5)(5x^2+4x-3)(3x^3+2x^2+3x-3)$$
$$(2x^2-x-2)(5x^2-3x+1)(x^3-2x^2+5x+1)$$
$$(4x^2-4x-1)(4x^2+5x+3)(4x^3+3x+4)$$
$$(2x^2+4x-5)(3x^2+x+3)(3x^3-2x^2-4x-5)$$
$$(3x^2+x-5)(5x^2+3)(3x^3-2x^2+4x+2)$$
$$(2x^2-3x+4)(3x^2-4x+5)(2x^3+3x^2-x+3)$$
$$(4x^2-x+2)(2x^2-4x-5)(4x^3-x^2+5x-1)$$
$$(x^2-5x+1)(5x^2-3x+2)(2x^3-3x^2+4x-2)$$
$$(3x^2+x-5)(x^2+x-5)(5x^3-3x^2+3x+3)$$
$$(5x^2+4x+5)(5x^2-3x-4)(2x^3+3x^2-x+5)$$
$$(5x^2+4x+2)(4x^2-5x+5)(x^3-5x^2+2x-4)$$
$$(2x^2+3x+2)(5x^2-3x-3)(4x^3-3x^2-5x-2)$$
$$(2x^2+5)(2x^2+2x+3)(5x^3+5x+2)$$
$$(4x^2-4x+5)(5x^2+3x+2)(3x^3+4x^2-x-4)$$

$$(x^2+4x-1)(5x^2-5x-3)(4x^3-4x^2-x-2)$$
$$(5x^2-4x-5)(4x^2+x-4)(2x^3-x^2+x-5)$$
$$(3x^2+4x-5)(2x^2+4x+5)(5x^3-x+3)$$
$$(2x^2+x-4)(x^2-4x-3)(5x^3+5x-1)$$
$$(5x^2-3)(4x^2-4x+3)(x^3+2x^2-3x+1)$$
$$(4x^2+4x-5)(x^2+x+1)(4x^3+5x-1)$$
$$(2x^2+3x-1)(5x^2-5x-3)(2x^3+2x^2+x+4)$$
$$(4x^2-5x+5)(3x^2+5x+4)(2x^3-4x^2-2x+1)$$
$$(x^2-2x+5)(3x^2+4x+4)(3x^3+x^2-5x-2)$$
$$(x^2+3x-2)(3x^2+4x-1)(5x^3-5x-3)$$
$$(3x^2-3x-2)(4x^2-5x-5)(4x^3+5x^2+5x+2)$$
$$(5x^2+4x+3)(4x^2+5x+4)(2x^3+3x^2+1)$$
$$(4x^2+5x+3)(3x^2-5x+4)(2x^3-4x^2+3x+2)$$
$$(3x^2+5x-3)(x^2+2x+4)(2x^3+x^2+5x+4)$$
$$(2x^2-x+5)(5x^2-2x+5)(4x^3+5x^2-x-1)$$
$$(x^2-x+1)(4x^2-x+5)(2x^3-3x^2+2x-5)$$
$$(5x^2-3x+2)(5x^2+x+5)(4x^3+x^2-4x-5)$$
$$(4x^2+3x-2)(x^2+5x-1)(4x^3-2x^2+4x-1)$$
$$(5x^2-2)(3x^2+x+3)(2x^3-5x^2+2)$$
$$(3x^2-4x+4)(x^2-5x-2)(4x^3+2x^2+5x-1)$$
$$(3x^2+2x-2)(2x^2-4x+1)(5x^3-3x^2+2x-1)$$
$$(4x^2-5x+2)(3x^2+4)(5x^3+x^2+3x-3)$$
$$(x^2-4x+1)(3x^2-2x+5)(3x^3+x^2+5x+1)$$
$$(5x^2-5x-1)(2x^2-5)(5x^3+5x^2+4x+5)$$
$$(3x^2+3x-4)(4x^2+3x+3)(4x^3+2x^2-x-3)$$
$$(4x^2+x+4)(4x^2-3x-2)(3x^3+2x^2-4x+5)$$
$$(x^2+2x-1)(2x^2+3x+2)(3x^3-3x^2-5x-3)$$
$$(5x^2+3x-5)(2x^2+x+5)(2x^3-x^2-2x-4)$$
$$(4x^2+x+3)(x^2-4x+5)(4x^3-4x^2-5x-4)$$
$$(3x^2+3x-5)(5x^2+4x-4)(3x^3+2x^2+x-5)$$
$$(5x^2+3x+4)(3x^2-2x+4)(5x^3-x^2-x-1)$$
$$(x^2-4x-2)(2x^2-3x-4)(2x^3+2x+3)$$
$$(x^2-5x-1)(2x^2+3x-1)(4x^3-5x^2+4x+5)$$
$$(3x^2-3x-4)(4x^2-5x-2)(3x^3-x^2+5x+2)$$
$$(3x^2-5x-3)(4x^2+3x+1)(x^3-5x^2-3x-3)$$
$$(4x^2-3x+3)(5x^2-x+5)(2x^3-x^2-x-4)$$
$$(x^2+5x+5)(5x^2-3)(x^3+4x^2-4x+1)$$
$$(3x^2+2x+5)(5x^2-2x+3)(3x^3-4x^2-x+4)$$
$$(2x^2+2x+1)(x^2-x+5)(x^3+4x^2+2x+5)$$
$$(x^2+2x+3)(x^2-2x+5)(4x^3-x^2-5x-4)$$
$$(x^2+5x+3)(5x^2+3x+5)(5x^3-2x^2+x+2)$$
$$(2x^2+5x-2)(3x^2-3x+4)(5x^3-5x+1)$$

$$(2x^2-3x-1)(x^2+4)(5x^3+5x^2+2x-1)$$
$$(3x^2+3x+4)(x^2-4x-1)(4x^3+2x^2-4x+5)$$
$$(5x^2-2x+2)(5x^2+1)(3x^3-3x^2-5x-1)$$
$$(2x^2+x+5)(3x^2+2x+1)(2x^3-2x^2+3x+1)$$
$$(3x^2-5)(5x^2-x-3)(4x^3+4x^2+5x+3)$$
$$(4x^2-x+5)(5x^2+4x+4)(4x^3-2x^2-x-2)$$
$$(2x^2+x+2)(2x^2-2x-5)(2x^3+x^2-x-3)$$
$$(5x^2+5x+4)(3x^2-x+2)(5x^3-2x^2+2x+5)$$
$$(3x^2-4x-2)(3x^2+4x-2)(2x^3+3x-3)$$
$$(5x^2+x-3)(4x^2+2x-5)(x^3+4x^2+x-3)$$
$$(5x^2+2)(x^2+4x-2)(4x^3+4x^2+x+5)$$
$$(4x^2-5x-4)(3x^2+4x+5)(x^3+x^2+4x+1)$$
$$(5x^2-5x-4)(3x^2+3x+4)(2x^3-5x^2+4x-2)$$
$$(5x^2+2x-4)(3x^2+4x-2)(3x^3+5x^2-5x-1)$$
$$(3x^2+3x+2)(4x^2+3)(5x^3+3x-3)$$
$$(5x^2+x+3)(3x^2+x+1)(4x^3-5x^2-1)$$
$$(2x^2+x-2)(5x^2+3x+2)(4x^3-2x^2-2x-3)$$
$$(2x^2+3x+4)(3x^2+3x-5)(3x^3+5x^2+5x-4)$$
$$(4x^2-4x+5)(3x^2-2x-3)(2x^3+5x^2-2x+5)$$
$$(x^2+x+5)(5x^2-4)(2x^3+5x^2-2x+5)$$
$$(5x^2-2x+3)(5x^2+x-5)(3x^3-x^2-3x+5)$$
$$(5x^2-4x-5)(5x^2+4x-5)(5x^3+4x^2+x-5)$$
$$(3x^2-5x-1)(3x^2-x+3)(x^3-3x^2-2x-4)$$
$$(3x^2-5x-1)(4x^2-5x+4)(2x^3+4x^2-4x+1)$$
$$(5x^2+3x-3)(2x^2-3x+3)(3x^3-2x^2-5x+5)$$
$$(x^2+x+2)(x^2-5x+3)(5x^3+2x^2+4x-3)$$
$$(5x^2-2x+2)(4x^2-2x+1)(x^3+x^2-4x+3)$$
$$(2x^2+2x+3)(3x^2+5)(4x^3+3x^2+4x-4)$$
$$(3x^2-4x-3)(2x^2-3x+3)(x^3-4x^2+3x+1)$$
$$(2x^2-1)(2x^2-4x+1)(5x^3-2x^2+4x-4)$$
$$(5x^2-x+5)(3x^2-5x+5)(3x^3+x^2-5x-4)$$
$$(2x^2-x+1)(3x^2-5)(x^3+4x^2+5x-2)$$
$$(3x^2+3x-4)(2x^2-3x-3)(5x^3+x^2+2x+2)$$
$$(2x^2+2x+5)(5x^2-4x+4)(5x^3+x^2-2x+3)$$
$$(5x^2-x+1)(x^2+4x+2)(x^3+3x^2-2x-5)$$
$$(4x^2-3x-5)(x^2-3x+3)(x^3+4x^2+2x+4)$$
$$(x^2-5x+5)(2x^2-5x-2)(x^3-5x-5)$$
$$(3x^2-4x+5)(4x^2-4x+3)(4x^3-4x^2-4x+3)$$
$$(3x^2-x-1)(x^2-2x-2)(4x^3-5x^2+5x+5)$$
$$(x^2+2x+3)(5x^2+3x+5)(2x^3+x^2-5x+5)$$
$$(4x^2-3x+1)(4x^2+3x+1)(3x^3+5x^2-3)$$
$$(5x^2-3x+4)(5x^2+4x-2)(4x^3+4x^2-3x+2)$$