

# Products of a Gazillion Fairly Easy Polynomials

Use these to assist you in creating examples, worksheets and tests. Throw darts, blindly drop your pencil or just tape it to the wall and use the first one your eyes go to. Enjoy not having to multiply them out every time!

$x(x+1)(x-1) = x^3-x$	$(x-1)(x-1) = x^2-2x+1$	$(x+1)(x+1) = x^2+2x+1$	$(x+1)(x-1) = x^2-1$	$(x-1)(x+1) = x^2-1$
$x(x+2)(x-2) = x^3-4x$	$(x-1)(x-2) = x^2-3x+2$	$(x+1)(x+2) = x^2+3x+2$	$(x+1)(x-2) = x^2-x-2$	$(x-1)(x+2) = x^2+x-2$
$x(x+3)(x-3) = x^3-9x$	$(x-1)(x-3) = x^2-4x+3$	$(x+1)(x+3) = x^2+4x+3$	$(x+1)(x-3) = x^2-2x-3$	$(x-1)(x+3) = x^2+2x-3$
$x(x+4)(x-4) = x^3-16x$	$(x-1)(x-4) = x^2-5x+4$	$(x+1)(x+4) = x^2+5x+4$	$(x+1)(x-4) = x^2-3x-4$	$(x-1)(x+4) = x^2+3x-4$
$x(x+5)(x-5) = x^3-25x$	$(x-1)(x-5) = x^2-6x+5$	$(x+1)(x+5) = x^2+6x+5$	$(x+1)(x-5) = x^2-4x-5$	$(x-1)(x+5) = x^2+4x-5$
$x(x+6)(x-6) = x^3-36x$	$(x-1)(x-6) = x^2-7x+6$	$(x+1)(x+6) = x^2+7x+6$	$(x+1)(x-6) = x^2-5x-6$	$(x-1)(x+6) = x^2+5x-6$
$x(x+7)(x-7) = x^3-49x$	$(x-1)(x-7) = x^2-8x+7$	$(x+1)(x+7) = x^2+8x+7$	$(x+1)(x-7) = x^2-6x-7$	$(x-1)(x+7) = x^2+6x-7$
$x(x+8)(x-8) = x^3-64x$	$(x-1)(x-8) = x^2-9x+8$	$(x+1)(x+8) = x^2+9x+8$	$(x+1)(x-8) = x^2-7x-8$	$(x-1)(x+8) = x^2+7x-8$
$x(x+9)(x-9) = x^3-81x$	$(x-1)(x-9) = x^2-10x+9$	$(x+1)(x+9) = x^2+10x+9$	$(x+1)(x-9) = x^2-8x-9$	$(x-1)(x+9) = x^2+8x-9$
$2x(x+1)(x-1) = 2x^3-2x$	$(x-2)(x-1) = x^2-3x+2$	$(x+2)(x+1) = x^2+3x+2$	$(x+2)(x-1) = x^2+x-2$	$(x-2)(x+1) = x^2-x-2$
$2x(x+2)(x-2) = 2x^3-8x$	$(x-2)(x-2) = x^2-4x+4$	$(x+2)(x+2) = x^2+4x+4$	$(x+2)(x-2) = x^2-4$	$(x-2)(x+2) = x^2-4$
$2x(x+3)(x-3) = 2x^3-18x$	$(x-2)(x-3) = x^2-5x+6$	$(x+2)(x+3) = x^2+5x+6$	$(x+2)(x-3) = x^2-x-6$	$(x-2)(x+3) = x^2+x-6$
$2x(x+4)(x-4) = 2x^3-32x$	$(x-2)(x-4) = x^2-6x+8$	$(x+2)(x+4) = x^2+6x+8$	$(x+2)(x-4) = x^2-2x-8$	$(x-2)(x+4) = x^2+2x-8$
$2x(x+5)(x-5) = 2x^3-50x$	$(x-2)(x-5) = x^2-7x+10$	$(x+2)(x+5) = x^2+7x+10$	$(x+2)(x-5) = x^2-3x-10$	$(x-2)(x+5) = x^2+3x-10$
$2x(x+6)(x-6) = 2x^3-72x$	$(x-2)(x-6) = x^2-8x+12$	$(x+2)(x+6) = x^2+8x+12$	$(x+2)(x-6) = x^2-4x-12$	$(x-2)(x+6) = x^2+4x-12$
$2x(x+7)(x-7) = 2x^3-98x$	$(x-2)(x-7) = x^2-9x+14$	$(x+2)(x+7) = x^2+9x+14$	$(x+2)(x-7) = x^2-5x-14$	$(x-2)(x+7) = x^2+5x-14$
$2x(x+8)(x-8) = 2x^3-128x$	$(x-2)(x-8) = x^2-10x+16$	$(x+2)(x+8) = x^2+10x+16$	$(x+2)(x-8) = x^2-6x-16$	$(x-2)(x+8) = x^2+6x-16$
$2x(x+9)(x-9) = 2x^3-162x$	$(x-2)(x-9) = x^2-11x+18$	$(x+2)(x+9) = x^2+11x+18$	$(x+2)(x-9) = x^2-7x-18$	$(x-2)(x+9) = x^2+7x-18$
$3x(x+1)(x-1) = 3x^3-3x$	$(x-3)(x-1) = x^2-4x+3$	$(x+3)(x+1) = x^2+4x+3$	$(x+3)(x-1) = x^2+2x-3$	$(x-3)(x+1) = x^2-2x-3$
$3x(x+2)(x-2) = 3x^3-12x$	$(x-3)(x-2) = x^2-5x+6$	$(x+3)(x+2) = x^2+5x+6$	$(x+3)(x-2) = x^2+x-6$	$(x-3)(x+2) = x^2-x-6$
$3x(x+3)(x-3) = 3x^3-27x$	$(x-3)(x-3) = x^2-6x+9$	$(x+3)(x+3) = x^2+6x+9$	$(x+3)(x-3) = x^2-9$	$(x-3)(x+3) = x^2-9$
$3x(x+4)(x-4) = 3x^3-48x$	$(x-3)(x-4) = x^2-7x+12$	$(x+3)(x+4) = x^2+7x+12$	$(x+3)(x-4) = x^2-x-12$	$(x-3)(x+4) = x^2+x-12$
$3x(x+5)(x-5) = 3x^3-75x$	$(x-3)(x-5) = x^2-8x+15$	$(x+3)(x+5) = x^2+8x+15$	$(x+3)(x-5) = x^2-2x-15$	$(x-3)(x+5) = x^2+2x-15$
$3x(x+6)(x-6) = 3x^3-108x$	$(x-3)(x-6) = x^2-9x+18$	$(x+3)(x+6) = x^2+9x+18$	$(x+3)(x-6) = x^2-3x-18$	$(x-3)(x+6) = x^2+3x-18$
$3x(x+7)(x-7) = 3x^3-147x$	$(x-3)(x-7) = x^2-10x+21$	$(x+3)(x+7) = x^2+10x+21$	$(x+3)(x-7) = x^2-4x-21$	$(x-3)(x+7) = x^2+4x-21$
$3x(x+8)(x-8) = 3x^3-192x$	$(x-3)(x-8) = x^2-11x+24$	$(x+3)(x+8) = x^2+11x+24$	$(x+3)(x-8) = x^2-5x-24$	$(x-3)(x+8) = x^2+5x-24$
$3x(x+9)(x-9) = 3x^3-243x$	$(x-3)(x-9) = x^2-12x+27$	$(x+3)(x+9) = x^2+12x+27$	$(x+3)(x-9) = x^2-6x-27$	$(x-3)(x+9) = x^2+6x-27$
$4x(x+1)(x-1) = 4x^3-4x$	$(x-4)(x-1) = x^2-5x+4$	$(x+4)(x+1) = x^2+5x+4$	$(x+4)(x-1) = x^2+3x-4$	$(x-4)(x+1) = x^2-3x-4$
$4x(x+2)(x-2) = 4x^3-16x$	$(x-4)(x-2) = x^2-6x+8$	$(x+4)(x+2) = x^2+6x+8$	$(x+4)(x-2) = x^2+2x-8$	$(x-4)(x+2) = x^2-2x-8$
$4x(x+3)(x-3) = 4x^3-36x$	$(x-4)(x-3) = x^2-7x+12$	$(x+4)(x+3) = x^2+7x+12$	$(x+4)(x-3) = x^2+x-12$	$(x-4)(x+3) = x^2-x-12$
$4x(x+4)(x-4) = 4x^3-64x$	$(x-4)(x-4) = x^2-8x+16$	$(x+4)(x+4) = x^2+8x+16$	$(x+4)(x-4) = x^2-16$	$(x-4)(x+4) = x^2-16$
$4x(x+5)(x-5) = 4x^3-100x$	$(x-4)(x-5) = x^2-9x+20$	$(x+4)(x+5) = x^2+9x+20$	$(x+4)(x-5) = x^2-x-20$	$(x-4)(x+5) = x^2+x-20$
$4x(x+6)(x-6) = 4x^3-144x$	$(x-4)(x-6) = x^2-10x+24$	$(x+4)(x+6) = x^2+10x+24$	$(x+4)(x-6) = x^2-2x-24$	$(x-4)(x+6) = x^2+2x-24$
$4x(x+7)(x-7) = 4x^3-196x$	$(x-4)(x-7) = x^2-11x+28$	$(x+4)(x+7) = x^2+11x+28$	$(x+4)(x-7) = x^2-3x-28$	$(x-4)(x+7) = x^2+3x-28$
$4x(x+8)(x-8) = 4x^3-256x$	$(x-4)(x-8) = x^2-12x+32$	$(x+4)(x+8) = x^2+12x+32$	$(x+4)(x-8) = x^2-4x-32$	$(x-4)(x+8) = x^2+4x-32$
$4x(x+9)(x-9) = 4x^3-324x$	$(x-4)(x-9) = x^2-13x+36$	$(x+4)(x+9) = x^2+13x+36$	$(x+4)(x-9) = x^2-5x-36$	$(x-4)(x+9) = x^2+5x-36$
$5x(x+1)(x-1) = 5x^3-5x$	$(x-5)(x-1) = x^2-6x+5$	$(x+5)(x+1) = x^2+6x+5$	$(x+5)(x-1) = x^2+4x-5$	$(x-5)(x+1) = x^2-4x-5$
$5x(x+2)(x-2) = 5x^3-20x$	$(x-5)(x-2) = x^2-7x+10$	$(x+5)(x+2) = x^2+7x+10$	$(x+5)(x-2) = x^2+3x-10$	$(x-5)(x+2) = x^2-3x-10$
$5x(x+3)(x-3) = 5x^3-45x$	$(x-5)(x-3) = x^2-8x+15$	$(x+5)(x+3) = x^2+8x+15$	$(x+5)(x-3) = x^2+2x-15$	$(x-5)(x+3) = x^2-2x-15$
$5x(x+4)(x-4) = 5x^3-80x$	$(x-5)(x-4) = x^2-9x+20$	$(x+5)(x+4) = x^2+9x+20$	$(x+5)(x-4) = x^2+x-20$	$(x-5)(x+4) = x^2-x-20$
$5x(x+5)(x-5) = 5x^3-125x$	$(x-5)(x-5) = x^2-10x+25$	$(x+5)(x+5) = x^2+10x+25$	$(x+5)(x-5) = x^2-25$	$(x-5)(x+5) = x^2-25$
$5x(x+6)(x-6) = 5x^3-180x$	$(x-5)(x-6) = x^2-11x+30$	$(x+5)(x+6) = x^2+11x+30$	$(x+5)(x-6) = x^2-x-30$	$(x-5)(x+6) = x^2+x-30$
$5x(x+7)(x-7) = 5x^3-245x$	$(x-5)(x-7) = x^2-12x+35$	$(x+5)(x+7) = x^2+12x+35$	$(x+5)(x-7) = x^2-2x-35$	$(x-5)(x+7) = x^2+2x-35$
$5x(x+8)(x-8) = 5x^3-320x$	$(x-5)(x-8) = x^2-13x+40$	$(x+5)(x+8) = x^2+13x+40$	$(x+5)(x-8) = x^2-3x-40$	$(x-5)(x+8) = x^2+3x-40$

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$5x(x+9)(x-9) = 5x^3-405x$	$(x-5)(x-9) = x^2-14x+45$	$(x+5)(x+9) = x^2+14x+45$	$(x+5)(x-9) = x^2-4x-45$	$(x-5)(x+9) = x^2+4x-45$
$6x(x+1)(x-1) = 6x^3-6x$	$(x-6)(x-1) = x^2-7x+6$	$(x+6)(x+1) = x^2+7x+6$	$(x+6)(x-1) = x^2+5x-6$	$(x-6)(x+1) = x^2-5x-6$
$6x(x+2)(x-2) = 6x^3-24x$	$(x-6)(x-2) = x^2-8x+12$	$(x+6)(x+2) = x^2+8x+12$	$(x+6)(x-2) = x^2+4x-12$	$(x-6)(x+2) = x^2-4x-12$
$6x(x+3)(x-3) = 6x^3-54x$	$(x-6)(x-3) = x^2-9x+18$	$(x+6)(x+3) = x^2+9x+18$	$(x+6)(x-3) = x^2+3x-18$	$(x-6)(x+3) = x^2-3x-18$
$6x(x+4)(x-4) = 6x^3-96x$	$(x-6)(x-4) = x^2-10x+24$	$(x+6)(x+4) = x^2+10x+24$	$(x+6)(x-4) = x^2+2x-24$	$(x-6)(x+4) = x^2-2x-24$
$6x(x+5)(x-5) = 6x^3-150x$	$(x-6)(x-5) = x^2-11x+30$	$(x+6)(x+5) = x^2+11x+30$	$(x+6)(x-5) = x^2+x-30$	$(x-6)(x+5) = x^2-x-30$
$6x(x+6)(x-6) = 6x^3-216x$	$(x-6)(x-6) = x^2-12x+36$	$(x+6)(x+6) = x^2+12x+36$	$(x+6)(x-6) = x^2-36$	$(x-6)(x+6) = x^2-36$
$6x(x+7)(x-7) = 6x^3-294x$	$(x-6)(x-7) = x^2-13x+42$	$(x+6)(x+7) = x^2+13x+42$	$(x+6)(x-7) = x^2-x-42$	$(x-6)(x+7) = x^2+x-42$
$6x(x+8)(x-8) = 6x^3-384x$	$(x-6)(x-8) = x^2-14x+48$	$(x+6)(x+8) = x^2+14x+48$	$(x+6)(x-8) = x^2-2x-48$	$(x-6)(x+8) = x^2+2x-48$
$6x(x+9)(x-9) = 6x^3-486x$	$(x-6)(x-9) = x^2-15x+54$	$(x+6)(x+9) = x^2+15x+54$	$(x+6)(x-9) = x^2-3x-54$	$(x-6)(x+9) = x^2+3x-54$
$7x(x+1)(x-1) = 7x^3-7x$	$(x-7)(x-1) = x^2-8x+7$	$(x+7)(x+1) = x^2+8x+7$	$(x+7)(x-1) = x^2+6x-7$	$(x-7)(x+1) = x^2-6x-7$
$7x(x+2)(x-2) = 7x^3-28x$	$(x-7)(x-2) = x^2-9x+14$	$(x+7)(x+2) = x^2+9x+14$	$(x+7)(x-2) = x^2+5x-14$	$(x-7)(x+2) = x^2-5x-14$
$7x(x+3)(x-3) = 7x^3-63x$	$(x-7)(x-3) = x^2-10x+21$	$(x+7)(x+3) = x^2+10x+21$	$(x+7)(x-3) = x^2+4x-21$	$(x-7)(x+3) = x^2-4x-21$
$7x(x+4)(x-4) = 7x^3-112x$	$(x-7)(x-4) = x^2-11x+28$	$(x+7)(x+4) = x^2+11x+28$	$(x+7)(x-4) = x^2+3x-28$	$(x-7)(x+4) = x^2-3x-28$
$7x(x+5)(x-5) = 7x^3-175x$	$(x-7)(x-5) = x^2-12x+35$	$(x+7)(x+5) = x^2+12x+35$	$(x+7)(x-5) = x^2+2x-35$	$(x-7)(x+5) = x^2-2x-35$
$7x(x+6)(x-6) = 7x^3-252x$	$(x-7)(x-6) = x^2-13x+42$	$(x+7)(x+6) = x^2+13x+42$	$(x+7)(x-6) = x^2+x-42$	$(x-7)(x+6) = x^2-x-42$
$7x(x+7)(x-7) = 7x^3-343x$	$(x-7)(x-7) = x^2-14x+49$	$(x+7)(x+7) = x^2+14x+49$	$(x+7)(x-7) = x^2-49$	$(x-7)(x+7) = x^2-49$
$7x(x+8)(x-8) = 7x^3-448x$	$(x-7)(x-8) = x^2-15x+56$	$(x+7)(x+8) = x^2+15x+56$	$(x+7)(x-8) = x^2-x-56$	$(x-7)(x+8) = x^2+x-56$
$7x(x+9)(x-9) = 7x^3-567x$	$(x-7)(x-9) = x^2-16x+63$	$(x+7)(x+9) = x^2+16x+63$	$(x+7)(x-9) = x^2-2x-63$	$(x-7)(x+9) = x^2+2x-63$
$8x(x+1)(x-1) = 8x^3-8x$	$(x-8)(x-1) = x^2-9x+8$	$(x+8)(x+1) = x^2+9x+8$	$(x+8)(x-1) = x^2+7x-8$	$(x-8)(x+1) = x^2-7x-8$
$8x(x+2)(x-2) = 8x^3-32x$	$(x-8)(x-2) = x^2-10x+16$	$(x+8)(x+2) = x^2+10x+16$	$(x+8)(x-2) = x^2+6x-16$	$(x-8)(x+2) = x^2-6x-16$
$8x(x+3)(x-3) = 8x^3-72x$	$(x-8)(x-3) = x^2-11x+24$	$(x+8)(x+3) = x^2+11x+24$	$(x+8)(x-3) = x^2+5x-24$	$(x-8)(x+3) = x^2-5x-24$
$8x(x+4)(x-4) = 8x^3-128x$	$(x-8)(x-4) = x^2-12x+32$	$(x+8)(x+4) = x^2+12x+32$	$(x+8)(x-4) = x^2+4x-32$	$(x-8)(x+4) = x^2-4x-32$
$8x(x+5)(x-5) = 8x^3-200x$	$(x-8)(x-5) = x^2-13x+40$	$(x+8)(x+5) = x^2+13x+40$	$(x+8)(x-5) = x^2+3x-40$	$(x-8)(x+5) = x^2-3x-40$
$8x(x+6)(x-6) = 8x^3-288x$	$(x-8)(x-6) = x^2-14x+48$	$(x+8)(x+6) = x^2+14x+48$	$(x+8)(x-6) = x^2+2x-48$	$(x-8)(x+6) = x^2-2x-48$
$8x(x+7)(x-7) = 8x^3-392x$	$(x-8)(x-7) = x^2-15x+56$	$(x+8)(x+7) = x^2+15x+56$	$(x+8)(x-7) = x^2+x-56$	$(x-8)(x+7) = x^2-x-56$
$8x(x+8)(x-8) = 8x^3-512x$	$(x-8)(x-8) = x^2-16x+64$	$(x+8)(x+8) = x^2+16x+64$	$(x+8)(x-8) = x^2-64$	$(x-8)(x+8) = x^2-64$
$8x(x+9)(x-9) = 8x^3-648x$	$(x-8)(x-9) = x^2-17x+72$	$(x+8)(x+9) = x^2+17x+72$	$(x+8)(x-9) = x^2-x-72$	$(x-8)(x+9) = x^2+x-72$
$9x(x+1)(x-1) = 9x^3-9x$	$(x-9)(x-1) = x^2-10x+9$	$(x+9)(x+1) = x^2+10x+9$	$(x+9)(x-1) = x^2+8x-9$	$(x-9)(x+1) = x^2-8x-9$
$9x(x+2)(x-2) = 9x^3-36x$	$(x-9)(x-2) = x^2-11x+18$	$(x+9)(x+2) = x^2+11x+18$	$(x+9)(x-2) = x^2+7x-18$	$(x-9)(x+2) = x^2-7x-18$
$9x(x+3)(x-3) = 9x^3-81x$	$(x-9)(x-3) = x^2-12x+27$	$(x+9)(x+3) = x^2+12x+27$	$(x+9)(x-3) = x^2+6x-27$	$(x-9)(x+3) = x^2-6x-27$
$9x(x+4)(x-4) = 9x^3-144x$	$(x-9)(x-4) = x^2-13x+36$	$(x+9)(x+4) = x^2+13x+36$	$(x+9)(x-4) = x^2+5x-36$	$(x-9)(x+4) = x^2-5x-36$
$9x(x+5)(x-5) = 9x^3-225x$	$(x-9)(x-5) = x^2-14x+45$	$(x+9)(x+5) = x^2+14x+45$	$(x+9)(x-5) = x^2+4x-45$	$(x-9)(x+5) = x^2-4x-45$
$9x(x+6)(x-6) = 9x^3-324x$	$(x-9)(x-6) = x^2-15x+54$	$(x+9)(x+6) = x^2+15x+54$	$(x+9)(x-6) = x^2+3x-54$	$(x-9)(x+6) = x^2-3x-54$
$9x(x+7)(x-7) = 9x^3-441x$	$(x-9)(x-7) = x^2-16x+63$	$(x+9)(x+7) = x^2+16x+63$	$(x+9)(x-7) = x^2+2x-63$	$(x-9)(x+7) = x^2-2x-63$
$9x(x+8)(x-8) = 9x^3-576x$	$(x-9)(x-8) = x^2-17x+72$	$(x+9)(x+8) = x^2+17x+72$	$(x+9)(x-8) = x^2+x-72$	$(x-9)(x+8) = x^2-x-72$
$9x(x+9)(x-9) = 9x^3-729x$	$(x-9)(x-9) = x^2-18x+81$	$(x+9)(x+9) = x^2+18x+81$	$(x+9)(x-9) = x^2-81$	$(x-9)(x+9) = x^2-81$