

## Three brackets

**Small integers and simple fractions. Includes squares. No negative leading  $x^3$ .**

1.	$(2x + 3)(2x - 3)(x + 3)$	$4x^3 + 12x^2 - 9x - 27$
2.	$(3x + 4)(x + 5)(x + 2)$	$3x^3 + 25x^2 + 58x + 40$
3.	$(3x - 1)(x + 2)(x + 5)$	$3x^3 + 20x^2 + 23x - 10$
4.	$(x - 2)(2x + 1)(x + 2)$	$2x^3 + x^2 - 8x - 4$
5.	$(x + 4)(x + 3)(x + 3)$	$x^3 + 10x^2 + 33x + 36$
6.	$(2x + 3)(x + 7)(x + 3)$	$2x^3 + 23x^2 + 72x + 63$
7.	$(x - 1)(x + 4)(x + 5)$	$x^3 + 8x^2 + x - 20$
8.	$(2x + 1)(2x + 7)(x + 4)$	$4x^3 + 32x^2 + 7x + 28$
9.	$(x - 1)(x + 3)(x + 3)$	$x^3 + 5x^2 + 3x - 9$
10.	$(x + 3)(x + 4)(x + 5)$	$x^3 + 12x^2 + 47x + 60$
11.	$(2x - 1)(2x + 7)(x + 4)$	$4x^3 + 28x^2 + 4x - 28$
12.	$(x + 1)(2x + 7)(x + 3)$	$2x^3 + 15x^2 + 34x + 21$
13.	$(3x + 2)(2x - 1)(x + 3)$	$6x^3 + 19x^2 + x - 6$
14.	$(2x + 3)(2x + 3)(x + 5)$	$4x^3 + 32x^2 + 69x + 45$
15.	$(3x + 1)(x + 2)(x + 2)$	$3x^3 + 13x^2 + 16x + 4$
16.	$(3x + 2)(x + 4)(x + 5)$	$3x^3 + 29x^2 + 78x + 40$
17.	$(3x - 2)(x + 7)(x + 1)$	$3x^3 + 22x^2 + 5x - 14$
18.	$(3x + 2)(2x - 3)(x + 3)$	$6x^3 + 13x^2 - 2x - 18$
19.	$(x + 7)(x + 1)(x + 1)$	$x^3 + 9x^2 + 15x + 7$
20.	$(x - 1)(x + 4)(x + 4)$	$x^3 + 7x^2 + 8x - 16$
21.	$(2x - 1)(x + 4)(x + 3)$	$2x^3 + 13x^2 + 17x - 12$
22.	$(2x - 1)(x + 3)(x + 4)$	$2x^3 + 13x^2 + 17x - 12$
23.	$(x + 3)(x + 1)(x - 1)$	$x^3 + 3x^2 - x - 3$
24.	$(2x + 3)(x + 7)(x + 4)$	$2x^3 + 25x^2 + 89x + 84$
25.	$(x + 2)(x + 3)(x + 3)$	$x^3 + 8x^2 + 2x + 18$
26.	$(2x + 1)(x + 7)(x + 3)$	$2x^3 + 2x^2 + 52x + 21$
27.	$(x + 4)(x + 1)(x + 1)$	$x^3 + 6x^2 + 9x + 4$
28.	$(x - 2)(x - 1)(x + 5)$	$x^3 + 2x^2 - 13x + 10$
29.	$(2x + 3)(x + 3)(x + 3)$	$2x^3 + 15x^2 + 36x + 27$
30.	$(3x - 2)(x + 2)(x + 5)$	$3x^3 + 19x^2 + 16x - 20$
31.	$(x + 4)(x + 6)(x + 3)$	$x^3 + 13x^2 + 54x + 72$
32.	$(3x + 4)(x + 3)(x + 3)$	$3x^3 + 22x^2 + 5x + 36$
33.	$(3x + 2)(x - 1)(x + 5)$	$3x^3 + 14x^2 - 7x - 10$
34.	$(x + 4)(2x + 7)(x + 3)$	$2x^3 + 2x^2 + 73x + 84$

35.	$(3x + 1)(2x - 3)(x + 5)$	$6x^3 + 23x^2 - 38x - 15$
36.	$(3x - 1)(x + 3)(x + 5)$	$3x^3 + 23x^2 + 37x - 15$
37.	$(x - 1)(x - 3)(x + 4)$	$x^3 - 13x + 12$
38.	$(3x - 1)(x - 2)(x + 2)$	$3x^3 - x^2 - 12x + 4$
39.	$(x - 2)(2x + 5)(x + 1)$	$2x^3 + 3x^2 - 9x - 10$
40.	$(x - 2)(x + 3)(x + 1)$	$x^3 + 2x^2 - 5x - 6$
41.	$(2x + 1)(x - 2)(x + 5)$	$2x^3 + 7x^2 - 17x - 10$
42.	$(3x + 2)(x + 4)(x + 2)$	$3x^3 + 20x^2 + 36x + 16$
43.	$(x + 3)(2x + 7)(x + 2)$	$2x^3 + 17x^2 + 47x + 42$
44.	$(2x + 1)(2x + 1)(x + 3)$	$4x^3 + 16x^2 + 13x + 3$
45.	$(x - 1)(x + 4)(x + 2)$	$x^3 + 5x^2 + 2x - 8$
46.	$(2x + 1)(2x + 7)(x + 2)$	$4x^3 + 24x^2 + 39x + 14$
47.	$(2x + 3)(2x - 1)(x + 4)$	$4x^3 + 20x^2 + 13x - 12$
48.	$(x - 1)(x + 3)(x + 2)$	$x^3 + 4x^2 + x - 6$
49.	$(3x - 2)(x - 3)(x + 3)$	$3x^3 - 2x^2 - 27x + 18$
50.	$(x + 1)(2x - 3)(x + 2)$	$2x^3 + 3x^2 - 5x - 6$
51.	$(3x + 1)(x + 2)(x + 5)$	$3x^3 + 22x^2 + 37x + 10$
52.	$(3x + 2)(x - 1)(x + 5)$	$3x^3 + 14x^2 - 7x - 10$
53.	$(2x + 3)(2x + 1)(x + 2)$	$4x^3 + 16x^2 + 19x + 6$
54.	$(2x + 1)(x + 4)(x + 2)$	$2x^3 + 13x^2 + 22x + 8$
55.	$(x - 2)(2x - 1)(x + 1)$	$2x^3 - 3x^2 - 3x + 2$
56.	$(x + 2)(x - 2)(x + 5)$	$x^3 + 5x^2 - 4x - 20$
57.	$(2x - 1)(x - 3)(x + 1)$	$2x^3 - 5x^2 - 4x + 3$
58.	$(x - 2)(x - 1)(x + 3)$	$x^3 - 7x + 6$
59.	$(3x + 2)(2x + 7)(x + 1)$	$6x^3 + 3x^2 + 39x + 14$
60.	$(3x + 4)(x + 5)(x + 5)$	$3x^3 + 34x^2 + 115x + 100$
61.	$(2x + 1)(2x + 5)(x + 2)$	$4x^3 + 20x^2 + 29x + 10$
62.	$(3x + 4)(x + 4)(x + 2)$	$3x^3 + 22x^2 + 48x + 32$
63.	$(2x - 1)(2x + 7)(x + 3)$	$4x^3 + 24x^2 + 29x - 21$
64.	$(2x - 1)(x + 7)(x + 5)$	$2x^3 + 23x^2 + 58x - 35$
65.	$(x + 2)(x + 1)(x - 1)$	$x^3 + 2x^2 - x - 2$
66.	$(x - 1)(x + 7)(x + 3)$	$x^3 + 9x^2 + x - 21$
67.	$(3x + 2)(x + 3)(x + 5)$	$3x^3 + 26x^2 + 6x + 30$
68.	$(x + 1)(x + 7)(x + 2)$	$x^3 + 10x^2 + 23x + 14$
69.	$(x + 4)(2x + 7)(x + 5)$	$2x^3 + 25x^2 + 103x + 140$
70.	$(2x + 5)(x + 1)(x - 1)$	$2x^3 + 5x^2 - 2x - 5$
71.	$(3x + 1)(2x + 7)(x + 3)$	$6x^3 + 4x^2 + 76x + 21$

72.	$(3x + 1)(x - 2)(x + 1)$	$3x^3 - 2x^2 - 7x - 2$
73.	$(x + 4)(x + 2)(x + 2)$	$x^3 + 8x^2 + 20x + 16$
74.	$(x + 4)(x - 3)(x + 1)$	$x^3 + 2x^2 - x - 12$
75.	$(3x + 1)(x + 1)(x + 5)$	$3x^3 + 19x^2 + 2x + 5$
76.	$(3x + 4)(x + 6)(x + 2)$	$3x^3 + 28x^2 + 68x + 48$
77.	$(3x + 2)(2x + 5)(x + 1)$	$6x^3 + 25x^2 + 29x + 10$
78.	$(x - 1)(x + 3)(x + 5)$	$x^3 + 7x^2 + 7x - 15$
79.	$(x - 1)(2x - 3)(x + 2)$	$2x^3 - x^2 - 7x + 6$
80.	$(3x - 1)(2x + 1)(x + 1)$	$6x^3 + 7x^2 - 1$
81.	$(3x - 1)(2x + 3)(x + 4)$	$6x^3 + 3x^2 + 25x - 12$
82.	$(2x - 1)(x + 2)(x + 3)$	$2x^3 + 9x^2 + 7x - 6$
83.	$(2x - 1)(2x + 7)(x + 4)$	$4x^3 + 28x^2 + 4x - 28$
84.	$(2x + 3)(x + 2)(x + 5)$	$2x^3 + 17x^2 + 4x + 30$
85.	$(x - 2)(x - 2)(x + 1)$	$x^3 - 3x^2 + 4$
86.	$(x + 1)(x + 3)(x + 5)$	$x^3 + 9x^2 + 23x + 15$
87.	$(3x - 2)(x + 7)(x + 2)$	$3x^3 + 25x^2 + 24x - 28$
88.	$(x + 2)(2x + 7)(x + 5)$	$2x^3 + 2x^2 + 69x + 70$
89.	$(3x - 2)(x - 1)(x + 2)$	$3x^3 + x^2 - 8x + 4$
90.	$(x + 4)(x - 1)(x + 2)$	$x^3 + 5x^2 + 2x - 8$
91.	$(x + 1)(x + 6)(x + 4)$	$x^3 + x^2 + 34x + 24$
92.	$(2x + 1)(2x - 3)(x + 4)$	$4x^3 + 12x^2 - 19x - 12$
93.	$(x + 4)(2x + 7)(x + 2)$	$2x^3 + 19x^2 + 58x + 56$
94.	$(x + 4)(x - 3)(x + 2)$	$x^3 + 3x^2 - 10x - 24$
95.	$(3x - 1)(x - 1)(x + 2)$	$3x^3 + 2x^2 - 7x + 2$
96.	$(x + 2)(2x + 1)(x + 5)$	$2x^3 + 15x^2 + 27x + 10$
97.	$(x - 2)(x + 4)(x + 4)$	$x^3 + 6x^2 - 32$
98.	$(x - 2)(x + 4)(x + 4)$	$x^3 + 6x^2 - 32$
99.	$(x + 3)(x - 1)(x + 1)$	$x^3 + 3x^2 - x - 3$
100.	$(3x + 2)(x + 7)(x + 2)$	$3x^3 + 29x^2 + 60x + 28$
101.	$(3x - 1)(2x + 1)(x + 1)$	$6x^3 + 7x^2 - 1$
102.	$(3x - 2)(x + 5)(x + 4)$	$3x^3 + 25x^2 + 42x - 40$
103.	$(3x + 4)(x - 1)(x + 2)$	$3x^3 + 7x^2 - 2x - 8$
104.	$(x + 2)(2x + 7)(x + 3)$	$2x^3 + 17x^2 + 47x + 42$
105.	$(x + 1)(x + 5)(x + 7)$	$x^3 + 13x^2 + 47x + 35$
106.	$(x + 1)(2x + 5)(x + 5)$	$2x^3 + 17x^2 + 40x + 25$
107.	$(x + 3)(2x + 7)(x + 2)$	$2x^3 + 17x^2 + 47x + 42$
108.	$(3x - 2)(2x + 5)(x + 1)$	$6x^3 + 17x^2 + x - 10$

109.	$(2x + 3)(2x + 3)(x + 2)$	$4x^3 + 20x^2 + 33x + 18$
110.	$(3x + 1)(2x + 3)(x + 5)$	$6x^3 + 4x^2 + 58x + 15$
111.	$(3x + 2)(2x + 7)(x + 4)$	$6x^3 + 49x^2 + 114x + 56$
112.	$(x + 3)(x - 1)(x + 2)$	$x^3 + 4x^2 + x - 6$
113.	$(3x + 2)(x - 2)(x + 1)$	$3x^3 - x^2 - 8x - 4$
114.	$(2x - 1)(2x + 7)(x + 2)$	$4x^3 + 20x^2 + 17x - 14$
115.	$(3x - 2)(x - 2)(x + 3)$	$3x^3 + x^2 - 20x + 12$
116.	$(3x + 1)(2x + 1)(x + 3)$	$6x^3 + 23x^2 + 16x + 3$
117.	$(3x + 2)(2x + 1)(x + 3)$	$6x^3 + 25x^2 + 23x + 6$
118.	$(x + 2)(x + 2)(x + 4)$	$x^3 + 8x^2 + 20x + 16$
119.	$(3x + 2)(2x - 1)(x + 2)$	$6x^3 + 13x^2 - 4$
120.	$(3x - 2)(x - 2)(x + 5)$	$3x^3 + 7x^2 - 36x + 20$
121.	$(x + 3)(x + 7)(x + 1)$	$x^3 + x^2 + 3x + 21$
122.	$(3x - 2)(2x + 7)(x + 4)$	$6x^3 + 4x^2 + 54x - 56$
123.	$(x + 2)(x - 1)(x + 5)$	$x^3 + 6x^2 + 3x - 10$
124.	$(x + 7)(x + 3)(x + 3)$	$x^3 + 13x^2 + 5x + 63$
125.	$(3x + 1)(x + 6)(x + 4)$	$3x^3 + 3x^2 + 82x + 24$
126.	$(x + 3)(x + 3)(x + 5)$	$x^3 + x^2 + 39x + 45$
127.	$(3x - 1)(2x + 5)(x + 5)$	$6x^3 + 43x^2 + 60x - 25$
128.	$(x + 2)(x + 4)(x + 7)$	$x^3 + 13x^2 + 50x + 56$
129.	$(x + 2)(x - 3)(x + 3)$	$x^3 + 2x^2 - 9x - 18$
130.	$(3x + 4)(2x + 5)(x + 1)$	$6x^3 + 29x^2 + 43x + 20$
131.	$(x + 1)(x + 2)(x + 4)$	$x^3 + 7x^2 + 14x + 8$
132.	$(3x + 2)(x - 3)(x + 1)$	$3x^3 - 4x^2 - 13x - 6$
133.	$(2x + 5)(x + 1)(x + 1)$	$2x^3 + 9x^2 + 12x + 5$
134.	$(x - 3)(x + 3)(x + 3)$	$x^3 + 3x^2 - 9x - 27$
135.	$(x + 5)(x + 3)(x + 3)$	$x^3 + x^2 + 39x + 45$
136.	$(x + 3)(x + 3)(x + 1)$	$x^3 + 7x^2 + 15x + 9$
137.	$(x - 2)(x + 1)(x + 3)$	$x^3 + 2x^2 - 5x - 6$
138.	$(x + 2)(x + 2)(x - 3)$	$x^3 + x^2 - 8x - 12$
139.	$(3x + 4)(2x + 5)(x + 4)$	$6x^3 + 47x^2 + 112x + 80$
140.	$(3x + 1)(2x + 3)(x + 3)$	$6x^3 + 29x^2 + 36x + 9$
141.	$(x + 1)(2x + 5)(x + 5)$	$2x^3 + 17x^2 + 40x + 25$
142.	$(2x + 3)(x + 3)(x + 3)$	$2x^3 + 15x^2 + 36x + 27$
143.	$(x - 1)(x + 5)(x + 2)$	$x^3 + 6x^2 + 3x - 10$
144.	$(3x + 1)(2x - 3)(x + 5)$	$6x^3 + 23x^2 - 38x - 15$
145.	$(3x - 2)(x - 3)(x + 5)$	$3x^3 + 4x^2 - 49x + 30$

146.	$(x - 1)(2x + 3)(x + 2)$	$2x^3 + 5x^2 - x - 6$
147.	$(x - 2)(2x + 1)(x + 4)$	$2x^3 + 5x^2 - 14x - 8$
148.	$(x + 1)(x + 3)(x + 4)$	$x^3 + 8x^2 + 19x + 12$
149.	$(x + 3)(2x + 3)(x + 5)$	$2x^3 + 19x^2 + 54x + 45$
150.	$(x + 4)(x + 2)(x + 2)$	$x^3 + 8x^2 + 20x + 16$
151.	$(2x + 3)(x + 4)(x + 4)$	$2x^3 + 19x^2 + 56x + 48$
152.	$(2x + 3)(x + 1)(x - 1)$	$2x^3 + 3x^2 - 2x - 3$
153.	$(x + 3)(2x + 5)(x + 4)$	$2x^3 + 19x^2 + 59x + 60$
154.	$(x + 1)(x + 7)(x + 4)$	$x^3 + 12x^2 + 39x + 28$
155.	$(x - 2)(x + 4)(x + 4)$	$x^3 + 6x^2 - 32$
156.	$(x + 4)(x + 7)(x + 2)$	$x^3 + 13x^2 + 50x + 56$
157.	$(x - 2)(x + 7)(x + 4)$	$x^3 + 9x^2 + 6x - 56$
158.	$(3x - 2)(x - 2)(x + 5)$	$3x^3 + 7x^2 - 36x + 20$
159.	$(3x + 1)(2x + 1)(x + 5)$	$6x^3 + 35x^2 + 26x + 5$
160.	$(2x - 1)(2x + 1)(x + 4)$	$4x^3 + 16x^2 - x - 4$
161.	$(3x - 1)(x + 3)(x + 3)$	$3x^3 + 17x^2 + 2x - 9$
162.	$(x + 2)(2x + 7)(x + 3)$	$2x^3 + 17x^2 + 47x + 42$
163.	$(2x - 1)(2x - 3)(x + 5)$	$4x^3 + 12x^2 - 37x + 15$
164.	$(3x + 2)(x - 1)(x + 1)$	$3x^3 + 2x^2 - 3x - 2$
165.	$(2x + 7)(x + 1)(x + 1)$	$2x^3 + x^2 + 16x + 7$
166.	$(3x - 1)(2x + 3)(x + 4)$	$6x^3 + 3x^2 + 25x - 12$
167.	$(2x + 3)(2x + 1)(x + 4)$	$4x^3 + 24x^2 + 35x + 12$
168.	$(x + 2)(2x + 7)(x + 5)$	$2x^3 + 2x^2 + 69x + 70$
169.	$(3x + 1)(x - 1)(x + 2)$	$3x^3 + 4x^2 - 5x - 2$
170.	$(2x + 3)(2x + 3)(x + 3)$	$4x^3 + 24x^2 + 45x + 27$
171.	$(x + 7)(x + 1)(x + 1)$	$x^3 + 9x^2 + 15x + 7$
172.	$(2x - 1)(x + 5)(x + 4)$	$2x^3 + 17x^2 + 3x - 20$
173.	$(2x - 1)(x - 1)(x + 5)$	$2x^3 + 7x^2 - 14x + 5$
174.	$(2x - 1)(2x + 7)(x + 5)$	$4x^3 + 32x^2 + 53x - 35$
175.	$(x + 5)(x + 4)(x + 4)$	$x^3 + 13x^2 + 56x + 80$
176.	$(2x + 1)(2x - 1)(x + 5)$	$4x^3 + 20x^2 - x - 5$
177.	$(x - 2)(x + 2)(x + 5)$	$x^3 + 5x^2 - 4x - 20$
178.	$(2x + 1)(x + 1)(x + 1)$	$2x^3 + 5x^2 + 4x + 1$
179.	$(3x + 2)(x + 4)(x + 5)$	$3x^3 + 29x^2 + 78x + 40$
180.	$(3x + 1)(x + 5)(x + 1)$	$3x^3 + 19x^2 + 2x + 5$
181.	$(x + 1)(2x + 1)(x + 3)$	$2x^3 + 9x^2 + 10x + 3$
182.	$(x + 3)(2x - 3)(x + 1)$	$2x^3 + 5x^2 - 6x - 9$

183.	$(x - 1)(x + 5)(x + 3)$	$x^3 + 7x^2 + 7x - 15$
184.	$(3x + 4)(x + 7)(x + 2)$	$3x^3 + 3x^2 + 78x + 56$
185.	$(2x + 1)(2x + 6)(x + 4)$	$4x^3 + 30x^2 + 62x + 24$
186.	$(3x - 1)(2x + 6)(x + 3)$	$6x^3 + 34x^2 + 42x - 18$
187.	$(x - 2)(2x + 5)(x + 5)$	$2x^3 + x^2 - 5x - 50$
188.	$(x + 1)(x - 1)(x + 2)$	$x^3 + 2x^2 - x - 2$
189.	$(x - 1)(x + 3)(x + 2)$	$x^3 + 4x^2 + x - 6$
190.	$(x + 1)(x + 2)(x + 2)$	$x^3 + 5x^2 + 8x + 4$
191.	$(3x + 1)(x + 4)(x + 4)$	$3x^3 + 25x^2 + 56x + 16$
192.	$(2x - 1)(x + 4)(x + 3)$	$2x^3 + 13x^2 + 17x - 12$
193.	$(3x + 1)(2x + 5)(x + 5)$	$6x^3 + 47x^2 + 90x + 25$
194.	$(3x - 1)(x + 5)(x + 4)$	$3x^3 + 26x^2 + 5x - 20$
195.	$(3x + 2)(x + 3)(x + 3)$	$3x^3 + 20x^2 + 39x + 18$
196.	$(x + 3)(x + 5)(x + 1)$	$x^3 + 9x^2 + 23x + 15$
197.	$(3x - 1)(x + 2)(x + 1)$	$3x^3 + 8x^2 + 3x - 2$
198.	$(3x + 2)(x + 7)(x + 5)$	$3x^3 + 38x^2 + 129x + 70$
199.	$(x - 1)(x + 4)(x + 5)$	$x^3 + 8x^2 + x - 20$
200.	$(x + 6)(x + 1)(x + 1)$	$x^3 + 8x^2 + 13x + 6$