

## Two brackets with common factors

Grouped with common factors. No negative leading  $x^2$ .

1.  $10x^2 + x - 24$   $(5x + 8)(2x - 3)$
2.  $5x^2 + 48x + 64$   $(5x + 8)(x + 8)$
3.  $5x^2 - 7x - 24$   $(5x + 8)(x - 3)$
4.  $5x^2 - 2x - 16$   $(5x + 8)(x - 2)$
5.  $25x^2 + 55x + 28$   $(5x + 7)(5x + 4)$
6.  $15x^2 + 46x + 35$   $(5x + 7)(3x + 5)$
7.  $15x^2 + 11x - 14$   $(5x + 7)(3x - 2)$
8.  $10x^2 + 39x + 35$   $(5x + 7)(2x + 5)$
9.  $5x^2 - 13x - 28$   $(5x + 7)(x - 4)$
10.  $20x^2 + 19x - 6$   $(5x + 6)(4x - 1)$
11.  $15x^2 + 28x + 12$   $(5x + 6)(3x + 2)$
12.  $10x^2 + 17x + 6$   $(5x + 6)(2x + 1)$
13.  $10x^2 + 7x - 6$   $(5x + 6)(2x - 1)$
14.  $5x^2 + 26x + 24$   $(5x + 6)(x + 4)$
15.  $5x^2 + 26x + 24$   $(5x + 6)(x + 4)$
16.  $5x^2 - 4x - 12$   $(5x + 6)(x - 2)$
17.  $5x^2 + x - 6$   $(5x + 6)(x - 1)$
18.  $25x^2 + 25x + 4$   $(5x + 4)(5x + 1)$
19.  $15x^2 + 17x + 4$   $(5x + 4)(3x + 1)$
20.  $10x^2 + 33x + 20$   $(5x + 4)(2x + 5)$
21.  $5x^2 + 9x + 4$   $(5x + 4)(x + 1)$
22.  $20x^2 + 27x + 9$   $(5x + 3)(4x + 3)$
23.  $15x^2 + 34x + 15$   $(5x + 3)(3x + 5)$
24.  $15x^2 - 11x - 12$   $(5x + 3)(3x - 4)$
25.  $5x^2 - 2x - 3$   $(5x + 3)(x - 1)$
26.  $25x^2 + 30x + 8$   $(5x + 2)(5x + 4)$
27.  $25x^2 + 5x - 2$   $(5x + 2)(5x - 1)$
28.  $10x^2 + 29x + 10$   $(5x + 2)(2x + 5)$
29.  $10x^2 + 19x + 6$   $(5x + 2)(2x + 3)$
30.  $25x^2 + 25x + 4$   $(5x + 1)(5x + 4)$
31.  $25x^2 - 10x - 3$   $(5x + 1)(5x - 3)$
32.  $15x^2 - 17x - 4$   $(5x + 1)(3x - 4)$
33.  $25x^2 - 25x + 4$   $(5x - 4)(5x - 1)$
34.  $15x^2 - 7x - 4$   $(5x - 4)(3x + 1)$

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| 35. | $15x^2 - 32x + 16$ | $(5x - 4)(3x - 4)$ |
| 36. | $10x^2 + 7x - 12$  | $(5x - 4)(2x + 3)$ |
| 37. | $5x^2 + 31x - 28$  | $(5x - 4)(x + 7)$  |
| 38. | $5x^2 + 16x - 16$  | $(5x - 4)(x + 4)$  |
| 39. | $5x^2 - 19x + 12$  | $(5x - 4)(x - 3)$  |
| 40. | $25x^2 - 35x + 12$ | $(5x - 3)(5x - 4)$ |
| 41. | $25x^2 - 20x + 3$  | $(5x - 3)(5x - 1)$ |
| 42. | $15x^2 - 19x + 6$  | $(5x - 3)(3x - 2)$ |
| 43. | $10x^2 - x - 3$    | $(5x - 3)(2x + 1)$ |
| 44. | $10x^2 - x - 3$    | $(5x - 3)(2x + 1)$ |
| 45. | $5x^2 + 37x - 24$  | $(5x - 3)(x + 8)$  |
| 46. | $5x^2 + 12x - 9$   | $(5x - 3)(x + 3)$  |
| 47. | $5x^2 - 23x + 12$  | $(5x - 3)(x - 4)$  |
| 48. | $5x^2 - 18x + 9$   | $(5x - 3)(x - 3)$  |
| 49. | $5x^2 - 13x + 6$   | $(5x - 3)(x - 2)$  |
| 50. | $25x^2 + 30x - 16$ | $(5x - 2)(5x + 8)$ |
| 51. | $20x^2 + 27x - 14$ | $(5x - 2)(4x + 7)$ |
| 52. | $5x^2 - 12x + 4$   | $(5x - 2)(x - 2)$  |
| 53. | $25x^2 - 20x + 3$  | $(5x - 1)(5x - 3)$ |
| 54. | $25x^2 - 10x + 1$  | $(5x - 1)(5x - 1)$ |
| 55. | $20x^2 - 9x + 1$   | $(5x - 1)(4x - 1)$ |
| 56. | $15x^2 + 37x - 8$  | $(5x - 1)(3x + 8)$ |
| 57. | $15x^2 + 17x - 4$  | $(5x - 1)(3x + 4)$ |
| 58. | $15x^2 + 2x - 1$   | $(5x - 1)(3x + 1)$ |
| 59. | $16x^2 + 8x - 15$  | $(4x + 5)(4x - 3)$ |
| 60. | $12x^2 + 31x + 20$ | $(4x + 5)(3x + 4)$ |
| 61. | $12x^2 + 23x + 10$ | $(4x + 5)(3x + 2)$ |
| 62. | $8x^2 + 6x - 5$    | $(4x + 5)(2x - 1)$ |
| 63. | $4x^2 + 33x + 35$  | $(4x + 5)(x + 7)$  |
| 64. | $20x^2 + 27x + 9$  | $(4x + 3)(5x + 3)$ |
| 65. | $16x^2 + 24x + 9$  | $(4x + 3)(4x + 3)$ |
| 66. | $12x^2 + x - 6$    | $(4x + 3)(3x - 2)$ |
| 67. | $8x^2 + 10x + 3$   | $(4x + 3)(2x + 1)$ |
| 68. | $8x^2 - 6x - 9$    | $(4x + 3)(2x - 3)$ |
| 69. | $4x^2 + 15x + 9$   | $(4x + 3)(x + 3)$  |
| 70. | $20x^2 + 13x + 2$  | $(4x + 1)(5x + 2)$ |
| 71. | $4x^2 + 33x + 8$   | $(4x + 1)(x + 8)$  |

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| 72.  | $4x^2 + 5x + 1$    | $(4x + 1)(x + 1)$  |
| 73.  | $4x^2 - 15x - 4$   | $(4x + 1)(x - 4)$  |
| 74.  | $20x^2 - 7x - 6$   | $(4x - 3)(5x + 2)$ |
| 75.  | $16x^2 - 24x + 9$  | $(4x - 3)(4x - 3)$ |
| 76.  | $16x^2 - 16x + 3$  | $(4x - 3)(4x - 1)$ |
| 77.  | $12x^2 + 11x - 15$ | $(4x - 3)(3x + 5)$ |
| 78.  | $12x^2 - x - 6$    | $(4x - 3)(3x + 2)$ |
| 79.  | $4x^2 + 21x - 18$  | $(4x - 3)(x + 6)$  |
| 80.  | $20x^2 + 7x - 3$   | $(4x - 1)(5x + 3)$ |
| 81.  | $12x^2 + 13x - 4$  | $(4x - 1)(3x + 4)$ |
| 82.  | $8x^2 - 14x + 3$   | $(4x - 1)(2x - 3)$ |
| 83.  | $4x^2 + 23x - 6$   | $(4x - 1)(x + 6)$  |
| 84.  | $4x^2 - 17x + 4$   | $(4x - 1)(x - 4)$  |
| 85.  | $4x^2 - 13x + 3$   | $(4x - 1)(x - 3)$  |
| 86.  | $15x^2 + 58x + 48$ | $(3x + 8)(5x + 6)$ |
| 87.  | $12x^2 + 41x + 24$ | $(3x + 8)(4x + 3)$ |
| 88.  | $6x^2 + 25x + 24$  | $(3x + 8)(2x + 3)$ |
| 89.  | $3x^2 + 5x - 8$    | $(3x + 8)(x - 1)$  |
| 90.  | $15x^2 + 37x + 20$ | $(3x + 5)(5x + 4)$ |
| 91.  | $15x^2 + 22x - 5$  | $(3x + 5)(5x - 1)$ |
| 92.  | $9x^2 + 30x + 25$  | $(3x + 5)(3x + 5)$ |
| 93.  | $9x^2 + 18x + 5$   | $(3x + 5)(3x + 1)$ |
| 94.  | $9x^2 + 3x - 20$   | $(3x + 5)(3x - 4)$ |
| 95.  | $6x^2 + 13x + 5$   | $(3x + 5)(2x + 1)$ |
| 96.  | $6x^2 + 7x - 5$    | $(3x + 5)(2x - 1)$ |
| 97.  | $15x^2 + 23x + 4$  | $(3x + 4)(5x + 1)$ |
| 98.  | $12x^2 + 31x + 20$ | $(3x + 4)(4x + 5)$ |
| 99.  | $9x^2 + 24x + 16$  | $(3x + 4)(3x + 4)$ |
| 100. | $9x^2 + 18x + 8$   | $(3x + 4)(3x + 2)$ |
| 101. | $3x^2 + 13x + 12$  | $(3x + 4)(x + 3)$  |
| 102. | $3x^2 + 13x + 12$  | $(3x + 4)(x + 3)$  |
| 103. | $3x^2 - 2x - 8$    | $(3x + 4)(x - 2)$  |
| 104. | $3x^2 + x - 4$     | $(3x + 4)(x - 1)$  |
| 105. | $15x^2 + 13x + 2$  | $(3x + 2)(5x + 1)$ |
| 106. | $9x^2 + 9x + 2$    | $(3x + 2)(3x + 1)$ |
| 107. | $9x^2 - 6x - 8$    | $(3x + 2)(3x - 4)$ |
| 108. | $3x^2 + 8x + 4$    | $(3x + 2)(x + 2)$  |

109.	$15x^2 + 29x + 8$	$(3x + 1)(5x + 8)$
110.	$15x^2 + 26x + 7$	$(3x + 1)(5x + 7)$
111.	$15x^2 + 23x + 6$	$(3x + 1)(5x + 6)$
112.	$15x^2 + 11x + 2$	$(3x + 1)(5x + 2)$
113.	$15x^2 - 4x - 3$	$(3x + 1)(5x - 3)$
114.	$15x^2 + 2x - 1$	$(3x + 1)(5x - 1)$
115.	$12x^2 + 13x + 3$	$(3x + 1)(4x + 3)$
116.	$12x^2 + x - 1$	$(3x + 1)(4x - 1)$
117.	$9x^2 - 1$	$(3x + 1)(3x - 1)$
118.	$15x^2 - 11x - 12$	$(3x - 4)(5x + 3)$
119.	$15x^2 - 32x + 16$	$(3x - 4)(5x - 4)$
120.	$12x^2 - 7x - 12$	$(3x - 4)(4x + 3)$
121.	$12x^2 - 13x - 4$	$(3x - 4)(4x + 1)$
122.	$3x^2 + 14x - 24$	$(3x - 4)(x + 6)$
123.	$9x^2 + 15x - 14$	$(3x - 2)(3x + 7)$
124.	$9x^2 - 4$	$(3x - 2)(3x + 2)$
125.	$6x^2 - x - 2$	$(3x - 2)(2x + 1)$
126.	$3x^2 + 4x - 4$	$(3x - 2)(x + 2)$
127.	$15x^2 + 4x - 3$	$(3x - 1)(5x + 3)$
128.	$12x^2 + 17x - 7$	$(3x - 1)(4x + 7)$
129.	$12x^2 - x - 1$	$(3x - 1)(4x + 1)$
130.	$9x^2 + 12x - 5$	$(3x - 1)(3x + 5)$
131.	$3x^2 + 14x - 5$	$(3x - 1)(x + 5)$
132.	$3x^2 + 2x - 1$	$(3x - 1)(x + 1)$
133.	$3x^2 - 7x + 2$	$(3x - 1)(x - 2)$
134.	$10x^2 + 41x + 21$	$(2x + 7)(5x + 3)$
135.	$10x^2 + 37x + 7$	$(2x + 7)(5x + 1)$
136.	$10x^2 + 27x - 28$	$(2x + 7)(5x - 4)$
137.	$8x^2 + 38x + 35$	$(2x + 7)(4x + 5)$
138.	$8x^2 + 30x + 7$	$(2x + 7)(4x + 1)$
139.	$6x^2 + 23x + 7$	$(2x + 7)(3x + 1)$
140.	$4x^2 + 16x + 7$	$(2x + 7)(2x + 1)$
141.	$2x^2 - x - 28$	$(2x + 7)(x - 4)$
142.	$2x^2 + x - 21$	$(2x + 7)(x - 3)$
143.	$2x^2 + 3x - 14$	$(2x + 7)(x - 2)$
144.	$10x^2 + 17x - 20$	$(2x + 5)(5x - 4)$
145.	$6x^2 + 7x - 20$	$(2x + 5)(3x - 4)$

146.	$6x^2 + 11x - 10$	$(2x + 5)(3x - 2)$
147.	$4x^2 + 16x + 15$	$(2x + 5)(2x + 3)$
148.	$10x^2 + 31x + 24$	$(2x + 3)(5x + 8)$
149.	$8x^2 + 22x + 15$	$(2x + 3)(4x + 5)$
150.	$8x^2 + 6x - 9$	$(2x + 3)(4x - 3)$
151.	$6x^2 + 19x + 15$	$(2x + 3)(3x + 5)$
152.	$4x^2 + 8x + 3$	$(2x + 3)(2x + 1)$
153.	$10x^2 + 11x + 3$	$(2x + 1)(5x + 3)$
154.	$8x^2 + 10x + 3$	$(2x + 1)(4x + 3)$
155.	$4x^2 + 16x + 7$	$(2x + 1)(2x + 7)$
156.	$4x^2 + 12x + 5$	$(2x + 1)(2x + 5)$
157.	$2x^2 + 7x + 3$	$(2x + 1)(x + 3)$
158.	$2x^2 + 5x + 2$	$(2x + 1)(x + 2)$
159.	$2x^2 - x - 1$	$(2x + 1)(x - 1)$
160.	$10x^2 - x - 21$	$(2x - 3)(5x + 7)$
161.	$10x^2 - 23x + 12$	$(2x - 3)(5x - 4)$
162.	$6x^2 - 11x + 3$	$(2x - 3)(3x - 1)$
163.	$4x^2 - 4x - 3$	$(2x - 3)(2x + 1)$
164.	$2x^2 + x - 6$	$(2x - 3)(x + 2)$
165.	$10x^2 + 11x - 8$	$(2x - 1)(5x + 8)$
166.	$6x^2 + 7x - 5$	$(2x - 1)(3x + 5)$
167.	$6x^2 - x - 1$	$(2x - 1)(3x + 1)$
168.	$6x^2 - 11x + 4$	$(2x - 1)(3x - 4)$
169.	$4x^2 - 1$	$(2x - 1)(2x + 1)$
170.	$2x^2 + 5x - 3$	$(2x - 1)(x + 3)$
171.	$2x^2 + 3x - 2$	$(2x - 1)(x + 2)$
172.	$5x^2 + 38x - 16$	$(x + 8)(5x - 2)$
173.	$4x^2 + 29x - 24$	$(x + 8)(4x - 3)$
174.	$3x^2 + 29x + 40$	$(x + 8)(3x + 5)$
175.	$3x^2 + 26x + 16$	$(x + 8)(3x + 2)$
176.	$3x^2 + 25x + 8$	$(x + 8)(3x + 1)$
177.	$3x^2 + 23x - 8$	$(x + 8)(3x - 1)$
178.	$x^2 + 15x + 56$	$(x + 8)(x + 7)$
179.	$5x^2 + 43x + 56$	$(x + 7)(5x + 8)$
180.	$4x^2 + 35x + 49$	$(x + 7)(4x + 7)$
181.	$4x^2 + 33x + 35$	$(x + 7)(4x + 5)$
182.	$4x^2 + 31x + 21$	$(x + 7)(4x + 3)$

183.	$3x^2 + 25x + 28$	$(x + 7)(3x + 4)$
184.	$3x^2 + 19x - 14$	$(x + 7)(3x - 2)$
185.	$3x^2 + 19x - 14$	$(x + 7)(3x - 2)$
186.	$x^2 + 9x + 14$	$(x + 7)(x + 2)$
187.	$5x^2 + 28x - 12$	$(x + 6)(5x - 2)$
188.	$3x^2 + 17x - 6$	$(x + 6)(3x - 1)$
189.	$x^2 + 14x + 48$	$(x + 6)(x + 8)$
190.	$x^2 + 12x + 36$	$(x + 6)(x + 6)$
191.	$x^2 + 8x + 12$	$(x + 6)(x + 2)$
192.	$5x^2 + 33x + 40$	$(x + 5)(5x + 8)$
193.	$x^2 + 11x + 30$	$(x + 5)(x + 6)$
194.	$x^2 + 9x + 20$	$(x + 5)(x + 4)$
195.	$5x^2 + 23x + 12$	$(x + 4)(5x + 3)$
196.	$5x^2 + 22x + 8$	$(x + 4)(5x + 2)$
197.	$5x^2 + 16x - 16$	$(x + 4)(5x - 4)$
198.	$3x^2 + 20x + 32$	$(x + 4)(3x + 8)$
199.	$3x^2 + 19x + 28$	$(x + 4)(3x + 7)$
200.	$3x^2 + 16x + 16$	$(x + 4)(3x + 4)$
201.	$2x^2 + 13x + 20$	$(x + 4)(2x + 5)$
202.	$2x^2 + 11x + 12$	$(x + 4)(2x + 3)$
203.	$2x^2 + 9x + 4$	$(x + 4)(2x + 1)$
204.	$x^2 + 7x + 12$	$(x + 4)(x + 3)$
205.	$x^2 + 6x + 8$	$(x + 4)(x + 2)$
206.	$3x^2 + 16x + 21$	$(x + 3)(3x + 7)$
207.	$2x^2 + 9x + 9$	$(x + 3)(2x + 3)$
208.	$2x^2 + 5x - 3$	$(x + 3)(2x - 1)$
209.	$x^2 + 5x + 6$	$(x + 3)(x + 2)$
210.	$4x^2 + 7x - 2$	$(x + 2)(4x - 1)$
211.	$3x^2 + 13x + 14$	$(x + 2)(3x + 7)$
212.	$x^2 + 4x + 4$	$(x + 2)(x + 2)$
213.	$x^2 - 4$	$(x + 2)(x - 2)$
214.	$5x^2 + x - 4$	$(x + 1)(5x - 4)$
215.	$4x^2 + 11x + 7$	$(x + 1)(4x + 7)$
216.	$3x^2 + 11x + 8$	$(x + 1)(3x + 8)$
217.	$3x^2 + 2x - 1$	$(x + 1)(3x - 1)$
218.	$x^2 + 9x + 8$	$(x + 1)(x + 8)$
219.	$x^2 + 5x + 4$	$(x + 1)(x + 4)$

220.	$x^2 - 3x - 4$	$(x + 1)(x - 4)$
221.	$x^2 - 1$	$(x + 1)(x - 1)$
222.	$5x^2 - 13x - 28$	$(x - 4)(5x + 7)$
223.	$5x^2 - 23x + 12$	$(x - 4)(5x - 3)$
224.	$3x^2 - 4x - 32$	$(x - 4)(3x + 8)$
225.	$3x^2 - 13x + 4$	$(x - 4)(3x - 1)$
226.	$x^2 - 16$	$(x - 4)(x + 4)$
227.	$x^2 - x - 12$	$(x - 4)(x + 3)$
228.	$5x^2 - 12x - 9$	$(x - 3)(5x + 3)$
229.	$5x^2 - 14x - 3$	$(x - 3)(5x + 1)$
230.	$5x^2 - 19x + 12$	$(x - 3)(5x - 4)$
231.	$4x^2 - 5x - 21$	$(x - 3)(4x + 7)$
232.	$4x^2 - 9x - 9$	$(x - 3)(4x + 3)$
233.	$3x^2 - 4x - 15$	$(x - 3)(3x + 5)$
234.	$3x^2 - 5x - 12$	$(x - 3)(3x + 4)$
235.	$3x^2 - 7x - 6$	$(x - 3)(3x + 2)$
236.	$3x^2 - 8x - 3$	$(x - 3)(3x + 1)$
237.	$2x^2 - 7x + 3$	$(x - 3)(2x - 1)$
238.	$x^2 - 2x - 3$	$(x - 3)(x + 1)$
239.	$x^2 - 4x + 3$	$(x - 3)(x - 1)$
240.	$5x^2 - 9x - 2$	$(x - 2)(5x + 1)$
241.	$3x^2 - 2x - 8$	$(x - 2)(3x + 4)$
242.	$3x^2 - 7x + 2$	$(x - 2)(3x - 1)$
243.	$x^2 + 6x - 16$	$(x - 2)(x + 8)$
244.	$x^2 + 5x - 14$	$(x - 2)(x + 7)$
245.	$x^2 + 3x - 10$	$(x - 2)(x + 5)$
246.	$x^2 + 3x - 10$	$(x - 2)(x + 5)$
247.	$5x^2 - 7x + 2$	$(x - 1)(5x - 2)$
248.	$3x^2 - x - 2$	$(x - 1)(3x + 2)$
249.	$x^2 + 2x - 3$	$(x - 1)(x + 3)$
250.	$x^2 - 3x + 2$	$(x - 1)(x - 2)$