

## Mathematik-Intensivierung \* Jahrgangsstufe 9

### Satz von Vieta

Löse die folgenden quadratischen Gleichungen mit dem Satz von Vieta

Nr.	Quadratische Gleichung
1	$x^2 + 3x - 28 = 0$
2	$x^2 - 3x - 28 = 0$
3	$x^2 - 11x + 28 = 0$
4	$x^2 + 11x + 28 = 0$
5	$x^2 + 3x - 18 = 0$
6	$x^2 + 7x - 18 = 0$
7	$x^2 - 11x - 12 = 0$
8	$x^2 - 9x + 8 = 0$
9	$x^2 - 18x + 45 = 0$
10	$x^2 + 2x - 48 = 0$
11	$x^2 + 10x - 24 = 0$
12	$x^2 + x - 132 = 0$
13	$x^2 - 12x + 36 = 0$
14	$x^2 + x - 20 = 0$
15	$x^2 - 13x + 42 = 0$
16	$x^2 - 2x - 8 = 0$
17	$x^2 + 4x - 96 = 0$
18	$x^2 - 16x + 60 = 0$
19	$x^2 - 3x - 54 = 0$
20	$x^2 + 3x - 108 = 0$



Nr.	Faktorisierung	Lösungen
1	$(x - 4)(x + 7) = 0$	$x_1 = 4 ; x_2 = -7$
2	$(x + 4)(x - 7) = 0$	$x_1 = -4 ; x_2 = 7$
3	$(x - 4)(x - 7) = 0$	$x_1 = 4 ; x_2 = 7$
4	$(x + 4)(x + 7) = 0$	$x_1 = -4 ; x_2 = -7$
5	$(x - 3)(x + 6) = 0$	$x_1 = 3 ; x_2 = -6$
6	$(x + 9)(x - 2) = 0$	$x_1 = -9 ; x_2 = 2$
7	$(x + 1)(x - 12) = 0$	$x_1 = -1 ; x_2 = 12$
8	$(x - 1)(x - 8) = 0$	$x_1 = 1 ; x_2 = 8$
9	$(x - 3)(x - 15) = 0$	$x_1 = 3 ; x_2 = 15$
10	$(x - 6)(x + 8) = 0$	$x_1 = 6 ; x_2 = -8$
11	$(x + 12)(x - 2) = 0$	$x_1 = -12 ; x_2 = 2$
12	$(x + 12)(x - 11) = 0$	$x_1 = -12 ; x_2 = 11$
13	$(x - 6)^2 = 0$	$x_1 = x_2 = 6$
14	$(x - 4)(x + 5) = 0$	$x_1 = 4 ; x_2 = -5$
15	$(x - 7)(x - 6) = 0$	$x_1 = 7 ; x_2 = 6$
16	$(x - 4)(x + 2) = 0$	$x_1 = 4 ; x_2 = -2$
17	$(x - 8)(x + 12) = 0$	$x_1 = 8 ; x_2 = -12$
18	$(x - 6)(x - 10) = 0$	$x_1 = 6 ; x_2 = 10$
19	$(x - 9)(x + 6) = 0$	$x_1 = 9 ; x_2 = -6$
20	$(x + 12)(x - 9) = 0$	$x_1 = -12 ; x_2 = 9$

