



Quadratische Gleichungen I

Löse mit Hilfe der pq-Formel.

$$1) \ x^2 + 28x - 22 = 0$$

$$2) \ x^2 + 6x - 2 = 0$$

$$3) \ x^2 - 11x - 11 = 0$$

$$4) \ x^2 - 14x + 1 = 0$$

$$5) \ x^2 - 5x - 19 = 0$$

$$6) \ x^2 - 6x - 24 = 0$$

$$7) \ x^2 + 13x - 4 = 0$$

$$8) \ x^2 + 32x + 10 = 0$$

$$9) \ x^2 + 6x - 13 = 0$$

$$10) \ x^2 + 32x - 27 = 0$$

$$11) \ x^2 - 10x - 26 = 0$$

$$12) \ x^2 + 12x + 9 = 0$$

$$13) \ x^2 + 10x - 1 = 0$$

$$14) \ x^2 + 20x - 12 = 0$$

$$15) \ x^2 + 13x - 16 = 0$$



Quadratische Gleichungen I

Lösungen

Löse mit Hilfe der pq-Formel.

$$1. \quad L = \{ -0.765, \quad 28.765 \}$$

$$2. \quad L = \{ -0.317, \quad 6.317 \}$$

$$3. \quad L = \{ -11.923, \quad 0.923 \}$$

$$4. \quad L = \{ -13.928, \quad -0.072 \}$$

$$5. \quad L = \{ -7.525, \quad 2.525 \}$$

$$6. \quad L = \{ -8.745, \quad 2.745 \}$$

$$7. \quad L = \{ -0.301, \quad 13.301 \}$$

$$8. \quad L = \{ 0.316, \quad 31.684 \}$$

$$9. \quad L = \{ -1.690, \quad 7.690 \}$$

$$10. \quad L = \{ -0.823, \quad 32.823 \}$$

$$11. \quad L = \{ -12.141, \quad 2.141 \}$$

$$12. \quad L = \{ 0.804, \quad 11.196 \}$$

$$13. \quad L = \{ -0.099, \quad 10.099 \}$$

$$14. \quad L = \{ -0.583, \quad 20.583 \}$$

$$15. \quad L = \{ -1.132, \quad 14.132 \}$$



Quadratische Gleichungen II

Löse mit Hilfe der pq-Formel.

$$1) \ x^2 + 28x - 4 = 0$$

$$2) \ x^2 - 8x + 6 = 0$$

$$3) \ x^2 + 3x - 9 = 0$$

$$4) \ x^2 + 18x - 23 = 0$$

$$5) \ x^2 + 12x - 8 = 0$$

$$6) \ x^2 - 6x - 5 = 0$$

$$7) \ x^2 - 9x - 26 = 0$$

$$8) \ x^2 - 12x - 34 = 0$$

$$9) \ x^2 - 3 = 0$$

$$10) \ x^2 + 32x - 8 = 0$$

$$11) \ x^2 - 3x - 13 = 0$$

$$12) \ x^2 - 7x - 9 = 0$$

$$13) \ x^2 + 23x + 12 = 0$$

$$14) \ x^2 + 27x + 3 = 0$$

$$15) \ x^2 - 12x + 8 = 0$$



Quadratische Gleichungen II

Löse mit Hilfe der pq-Formel.

$$1.) \ L = \{ -0.142, \ 28.142 \}$$

$$2.) \ L = \{ -7.162, \ -0.838 \}$$

$$3.) \ L = \{ -1.854, \ 4.854 \}$$

$$4.) \ L = \{ -1.198, \ 19.198 \}$$

$$5.) \ L = \{ -0.633, \ 12.633 \}$$

$$6.) \ L = \{ -6.742, \ 0.742 \}$$

$$7.) \ L = \{ -11.301, \ 2.301 \}$$

$$8.) \ L = \{ -14.367, \ 2.367 \}$$

$$9.) \ L = \{ -1.732, \ 1.732 \}$$

$$10.) \ L = \{ -0.248, \ 32.248 \}$$

$$11.) \ L = \{ -5.405, \ 2.405 \}$$

$$12.) \ L = \{ -8.110, \ 1.110 \}$$

$$13.) \ L = \{ 0.534, \ 22.466 \}$$

$$14.) \ L = \{ 0.112, \ 26.888 \}$$

$$15.) \ L = \{ -11.292, \ -0.708 \}$$



Quadratische Gleichungen III

Löse mit Hilfe der pq-Formel.

- 1) $10x^2 - 220x + 850 = 0$
- 2) $2x^2 + 20x - 750 = 0$
- 3) $14x^2 - 672x + 8064 = 0$
- 4) $17x^2 + 374x + 1445 = 0$
- 5) $2x^2 - 24x + 70 = 0$
- 6) $5x^2 + 25x - 880 = 0$
- 7) $16x^2 + 128x - 5520 = 0$
- 8) $16x^2 - 208x + 480 = 0$
- 9) $10x^2 - 220x + 1210 = 0$
- 10) $10x^2 + 320x + 1920 = 0$
- 11) $-4x^2 - 152x - 1300 = 0$
- 12) $11x^2 + 165x + 396 = 0$
- 13) $-4x^2 + 12x + 952 = 0$
- 14) $4x^2 + 96x + 252 = 0$
- 15) $1x^2 + 20x + 36 = 0$



Quadratische Gleichungen III

Lösungen

Löse mit Hilfe der pq-Formel.

$$1.) \ L = \{ 17, \ 5 \}$$

$$2.) \ L = \{ -25, \ 15 \}$$

$$3.) \ L = \{ 24, \ 24 \}$$

$$4.) \ L = \{ -5, -17 \}$$

$$5.) \ L = \{ 5, \ 7 \}$$

$$6.) \ L = \{ -16, \ 11 \}$$

$$7.) \ L = \{ -23, \ 15 \}$$

$$8.) \ L = \{ 3, \ 10 \}$$

$$9.) \ L = \{ 11, \ 11 \}$$

$$10.) \ L = \{ -8, -24 \}$$

$$11.) \ L = \{ -25, -13 \}$$

$$12.) \ L = \{ -12, \ -3 \}$$

$$13.) \ L = \{ 17, -14 \}$$

$$14.) \ L = \{ -3, -21 \}$$

$$15.) \ L = \{ -18, \ -2 \}$$



Quadratische Gleichungen IV

Löse mit Hilfe der pq-Formel.

$$1) \quad 14x^2 + 34x - 7 = 0$$

$$2) \quad 34x^2 - 9x - 28 = 0$$

$$3) \quad 20x^2 - 3x - 33 = 0$$

$$4) \quad -4x^2 + 16x - 4 = 0$$

$$5) \quad 6x^2 + 6x - 1 = 0$$

$$6) \quad 34x^2 - 8x - 19 = 0$$

$$7) \quad -7x^2 + 25x - 17 = 0$$

$$8) \quad -6x^2 + 19x + 12 = 0$$

$$9) \quad 8x^2 - 10x + 11 = 0$$

$$10) \quad -2x^2 + 1x + 2 = 0$$

$$11) \quad 29x^2 + 4x + 1 = 0$$

$$12) \quad 3x^2 + 34x + 7 = 0$$

$$13) \quad 6x^2 - 6x - 25 = 0$$

$$14) \quad 27x^2 - 3x - 29 = 0$$

$$15) \quad -7x^2 + 32x - 6 = 0$$



Quadratische Gleichungen IV

Lösungen

Löse mit Hilfe der pq-Formel.

$$1.) \ L = \{ -0,191 \mid | 2,619 \}$$

$$2.) \ L = \{ -1,049 \mid | 0,785 \}$$

$$3.) \ L = \{ -1,362 \mid | 1,212 \}$$

$$4.) \ L = \{ -3,732 \mid | -0,268 \}$$

$$5.) \ L = \{ -0,145 \mid | 1,145 \}$$

$$6.) \ L = \{ -0,874 \mid | 0,639 \}$$

$$7.) \ L = \{ -2,658 \mid | -0,914 \}$$

$$8.) \ L = \{ -3,706 \mid | 0,540 \}$$

9.) keine reelle Lösung

$$10.) \ L = \{ -1,281 \mid | 0,781 \}$$

11.) keine reelle Lösung

$$12.) \ L = \{ 0,210 \mid | 11,124 \}$$

$$13.) \ L = \{ -2,602 \mid | 1,602 \}$$

$$14.) \ L = \{ -1,093 \mid | 0,982 \}$$

$$15.) \ L = \{ -4,376 \mid | -0,196 \}$$