

Quadratische Gleichungen

Birgit Rex, 11/05

Berechne die Lösungen der quadratischen Gleichungen.
Male die Felder mit den richtigen Ergebnisse aus.

$$x + 1 - (x^2 - 1) = 0$$

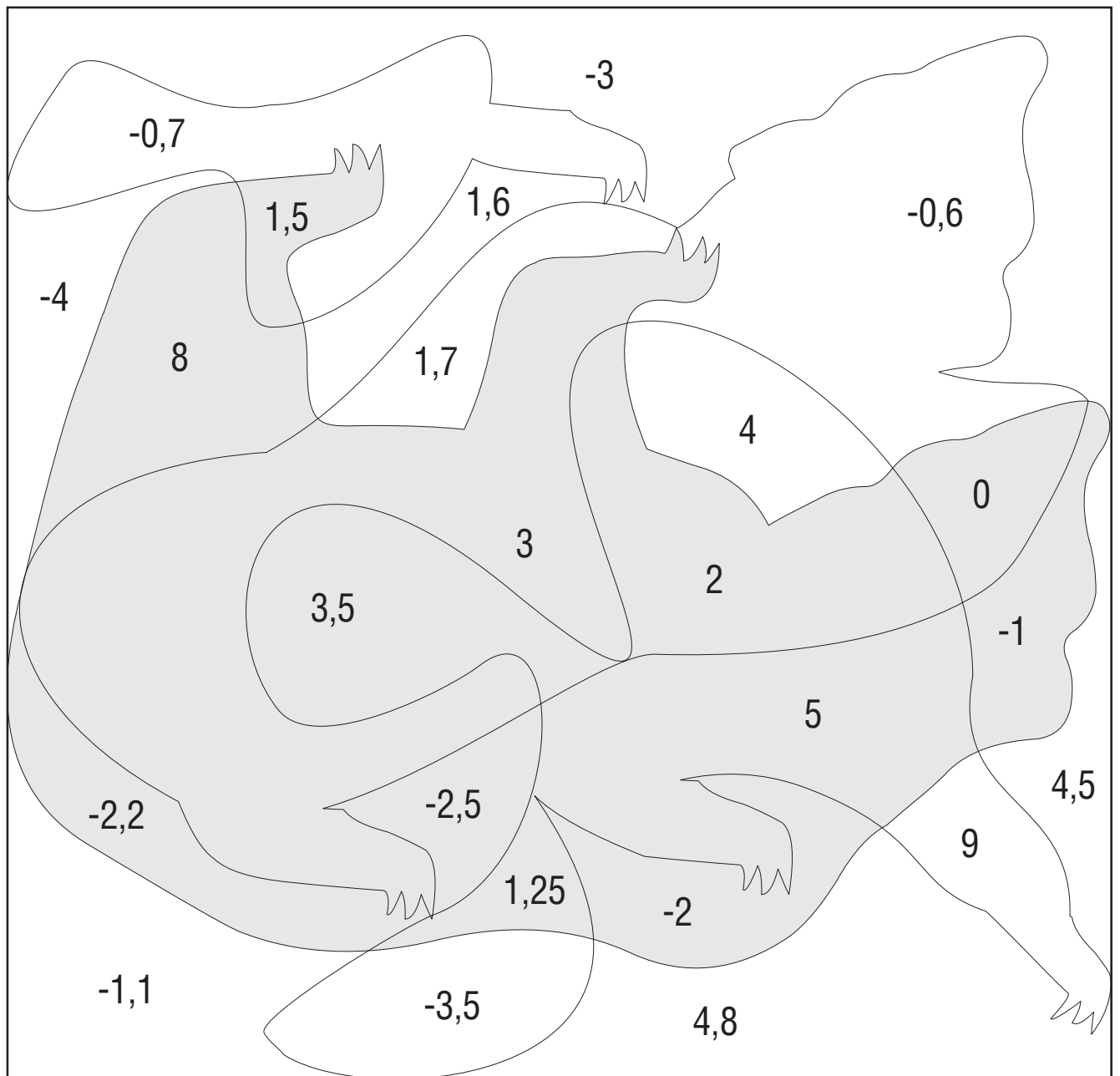
$$(x + 1)(2x + 3) = 4x^2 - 22$$

$$x^2 - 9 + (2x - 1)^2 = 25$$

$$(2x - 4)^2 = 4(x - 1,25)$$

$$(1,5x + 4)(1,5x - 4) = (x - 6)(x + 1) + (x + 2)(2x - 5)$$

$$(4x - 4)^2 - 3(2x - 3)^2 + (2x - 3)(2x + 3) = -2x$$



Lösungen:

$$x + 1 - (x^2 - 1) = 0$$

$$x_1 = 2 \quad x_2 = -1$$

$$(x + 1)(2x + 3) = 4x^2 - 22$$

$$x_1 = 5 \quad x_2 = -2,5$$

$$x^2 - 9 + (2x - 1)^2 = 25$$

$$x_1 = 3 \quad x_2 = -2,2$$

$$(2x - 4)^2 = 4(x - 1,25)$$

$$x_1 = 3,5 \quad x_2 = 1,5$$

$$(1,5x + 4)(1,5x - 4) = (x - 6)(x + 1) + (x + 2)(2x - 5)$$

$$x_1 = 8 \quad x_2 = 0$$

$$(4x - 4)^2 - 3(2x - 3)^2 + (2x - 3)(2x + 3) = -2x$$

$$x_1 = 1,25 \quad x_2 = -2$$