

① Löse die Gleichungen in $\mathbb{Q}$!

$$(5x - 1)^2 + (12x + 2)^2 = (13x - 3)^2$$

②

$$13x^2 + (6x - 5)^2 - (7x - 2)^2 = 0$$

③

$$-11(x^2 - 2) + (6x + 1)(6x - 1) = (5x + 3)^2$$

④

$$(3x - 7)^2 - (x - 7)^2 - (x - 2)(8x + 4) = 0$$

⑤

$$(2x - 3)^2 + (2x - 1)(2x + 1) = (x - 2)^2 - (-7x^2 + 4)$$

⑥

$$2x(x - 5) + 2 = x(2x - 7) + 3x + 5$$

⑦

$$(7x - 5)^2 + 4x = (7x - 1)^2 - 3$$

⑧

$$3(x - 1) - (6x + 4) = -3x - 2[(x + 1) - 5x + 3]$$