

Gemischte Übungen

a) $-\frac{5}{144}(3y-5)^3 - \frac{1}{3}(4-\frac{1}{2}y)^2 + \frac{221}{480}(5y-9)(5-2y) + \frac{13}{4}y^2 = (1-y)^3 + \frac{1}{4}y(\frac{1}{2}y+1)^2, G = \mathbb{Z}$

b) $-\frac{3}{2}[x-0,3(2x-7)^2 - 2x(3x+\frac{5}{2})^2 - \frac{1}{5}] - (5x-2)^2 = \frac{1}{4}(x+3)^2 + 27x^3 + 21,55x^2 + 7,05x, G = \mathbb{Q}$

c) $(z-1)(2n-1) = n(z-n), z \in \mathbb{Q} \wedge n \in \mathbb{Z}$

d) $\frac{2x}{a+1} - \frac{2a-6}{a-1} = \frac{x}{a-1}, z \in \mathbb{Q} \wedge a \in \mathbb{R} \setminus \{-1; 1\}$

e) $(x-c)(c+d) + (x-c-2d)(c-d) = 2(d-c)(c-x), x \in \mathbb{Q} \wedge c, d \in \mathbb{Z}$