Klammern – 14 (Lösung)

Fasse in der richtigen Reihenfolge zusammen:

a) $3x \cdot 7y - (5x + 1)^2 \cdot 2 - 24x^2 =$
$21xy - [25x^2 + 10x + 1] \cdot 2 - 24x^2 =$
$21xy - 50x^2 - 20x - 2 - 24x^2 =$
$\underline{21xy - 74x^2 - 20x - 2}$

b) $2a^2 + 12a^2 : 4 - (2a + 1)(2a - 1) =$
$2a^2 + 3a^2 - [4a^2 - 1] =$
$2a^2 + 3a^2 - 4a^2 + 1 =$
$\underline{a^2 + 1}$

c) $5a + 3a \cdot 9b + (4b - 10a)^2 - (a - 5b)(a + 5b) =$
$5a + 27ab + 16b^2 - 80ab + 100a^2 - [a^2 - 25b^2] =$
$5a + 27ab + 16b^2 - 80ab + 100a^2 - a^2 + 25b^2 =$
$\underline{5a - 53ab + 41b^2 + 99a^2}$

d) $5[4t^2 - (s - 2t)^2] - 10s \cdot 2t =$
$5[4t^2 - (s^2 - 4st + 4t^2)] - 20st =$
$5[4t^2 - s^2 + 4st - 4t^2] - 20st =$
$20t^2 - 5s^2 + 20st - 20t^2 - 20st =$
$\underline{5s^2}$

e) $[3(2x - y)]^2 - (6x - 2)(6x + 2) =$
$[6x - 3y]^2 - [36x^2 - 4] =$
$36x^2 - 36xy + 9y^2 - 36x^2 + 4 =$
$\underline{9y^2 - 36xy + 4}$