Verbindungsaufgaben

$5x \cdot 3y - 7x \cdot 2y =$

$= 15xy - 14xy =$

$= xy$

$36x^2 : 3x - 4x \cdot 15 =$

$= 12x - 60x =$

$= -48x$

$46a - 3 \cdot (12a + 3b) =$

$= 46a - 36a - 9b =$

$= 10a - 9b$

$6xy - (3x - 2y) \cdot 2y =$

$= 6xy - (6xy - 4y^2) =$

$= 6xy - 6xy + 4y^2 = 4y^2$

$10uv - (3u - 2v) \cdot (u + 4v) =$

$= 10\ uv - (3u^2 + 12uv - 2uv - 8v^2) =$

$=10\ uv - (3u^2 + 10uv - 8v^2) =$

$= 10\ uv - 3u^2 - 10uv + 8v^2 =$

$= - 3u^2 + 8v^2$

$x^2 - (x + y) \cdot (x - y) =$

$= x^2 - (x^2 - y^2) =$

$= x^2 - x^2 + y^2 =$

$= y^2$

$2a \cdot (3a + b) + (a - b)^2 =$

$= 6a^2 + 2ab + (a^2 - 2ab + b^2) =$

$= 7a^2 + b^2$

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

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

$= x^2 + 4x + 4 - x^2 + 4x - 4 = 8x$

$12x^2 - [(x + 2y)^2 - 4x \cdot (x + y)] + 4y^2 =$

$= 12x^2 - [x^2 + 4xy + 4y^2 - 4x^2 - 4xy] + 4y^2 =$

$= 12x^2 - [-3x^2 + 4y^2] + 4y^2 =$

$= 12x^2 + 3x^2 - 4y^2 + 4y^2 =$

$= 15x^2$