Binomische Formeln

Lösungsblatt

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

$(3a+2b)^2 = \mathbf{9a^2 + 12ab + 4b^2}$	$(a-14b)^2 = \mathbf{a^2 - 28ab + 196b^2}$
$(6c+3d)^2 = \mathbf{36c^2 + 36cd + 9d^2}$	$(20c-2d)^2 = \mathbf{400c^2 - 80cd + 4d^2}$
$(4e-6f)^2 = \mathbf{16e^2 - 48ef + 36f^2}$	$(e+2f)^2 = \mathbf{e^2 + 4ef + 4f^2}$
$(-g+2h)^2 = \mathbf{g^2 - 4gh + 4h^2}$	$(2g-5h)^2 = \mathbf{4g^2 - 20gh + 25h^2}$
$(7i-3j)^2 = \mathbf{49i^2 - 42ij + 9j^2}$	$(15i-j)^2 = \mathbf{225i^2 - 30ij + j^2}$
$(10m+n)^2 = \mathbf{100m^2 + 20mn + n^2}$	$(10m-2n)^2 = \mathbf{100m^2 - 40mn + 4n^2}$
$(2p-2q)^2 = \mathbf{4p^2 - 8pq + 4q^2}$	$(-8p-6q)^2 = \mathbf{64p^2 + 96pq + 36q^2}$
$(-8r+5s)^2 = \mathbf{64r^2 - 80rs + 25s^2}$	$(3r-9s)^2 = \mathbf{9r^2 - 54rs + 81s^2}$
$(9u+4v)^2 = \mathbf{81u^2 + 72uv + 16v^2}$	$(5u-4v)^2 = \mathbf{25u^2 - 40uv + 16v^2}$
$(-12x-3y)^2 = \mathbf{144x^2 + 72xy + 9y^2}$	$(x+5y)^2 = \mathbf{x^2 + 10xy + 25y^2}$

Male die Lösungen an!

$36c^2 + 36cd + 9d^2$	$g^2 - 4gh + 4h^2$	$225i^2 - 30ij + j^2$	$100m^2 - 40mn + 4n^2$
$x^2 + 10xy + 25y^2$	$25u^2 - 40uv + 16v^2$	$9a^2 + 12ab + 4b^2$	$81u^2 + 72uv + 16v^2$
$16e^2 - 48ef + 36f^2$	$144x^2 + 72xy + 9y^2$	$9r^2 - 54rs + 81s^2$	$e^2 + 4ef + 4f^2$
$64r^2 - 80rs + 25s^2$	$4g^2 - 20gh + 25h^2$	$a^2 - 28ab + 196b^2$	$100m^2 + 20mn + n^2$
$400c^2 - 80cd + 4d^2$	$49i^2 - 42ij + 9j^2$	$4p^2 - 8pq + 4q^2$	$64p^2 + 96pq + 36q^2$

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