

# Binomische Formeln

*Arbeitsblatt*

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

|                   |                  |
|-------------------|------------------|
| $(3a + 2b)^2 =$   | $(a - 14b)^2 =$  |
| $(6c + 3d)^2 =$   | $(20c - 2d)^2 =$ |
| $(4e - 6f)^2 =$   | $(e + 2f)^2 =$   |
| $(-g + 2h)^2 =$   | $(2g - 5h)^2 =$  |
| $(7i - 3j)^2 =$   | $(15i - j)^2 =$  |
| $(10m + n)^2 =$   | $(10m - 2n)^2 =$ |
| $(2p - 2q)^2 =$   | $(-8p - 6q)^2 =$ |
| $(-8r + 5s)^2 =$  | $(3r - 9s)^2 =$  |
| $(9u + 4v)^2 =$   | $(5u - 4v)^2 =$  |
| $(-12x - 3y)^2 =$ | $(x + 5y)^2 =$   |

Male die Lösungen an!

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