

Binomische Formeln

Arbeitsblatt

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

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

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

Level 1 :

$$(x + y)^2 = x^2 + 2xy + y^2$$

$$(a + 3)^2 = a^2 + 2 \cdot a \cdot 3 + 3^2 = a^2 + 6a + 9$$

Level 2 :

$$(4 - c)^2 = 4^2 - 2 \cdot 4 \cdot c + c^2 = 16 - 8c + c^2$$

$$(e - 9)^2 = e^2 - 2 \cdot e \cdot 9 + 9^2 = e^2 - 18e + 81$$

Level 3 :

$$(s + 3t)^2 = s^2 + 6st + 9t^2$$

$$(b + 4c)^2 = b^2 + 8bc + 16c^2$$

Level 4 :

$$(3a - b)^2 = 9a^2 - 6ab + b^2$$

$$(c - 5d)^2 = c^2 - 10cd + 25d^2$$

Level 5 :

$$(3e + 5f)^2 = 9e^2 + 30ef + 25f^2$$

$$(2x + 3y)^2 = 4x^2 + 12xy + 9y^2$$

Level 6 :

$$(4e - 6f)^2 = 16e^2 - 48ef + 36f^2$$

$$(8x - 3y)^2 = 64x^2 - 48xy + 9y^2$$

Level 7 :

$$(-x + 3y)^2 = x^2 - 6xy + 9y^2$$

$$(-2a + 5b)^2 = 4a^2 - 20ab + 25b^2$$

Level 8 :

$$(-r - s)^2 = r^2 + 2rs + s^2$$

$$(-7p - 2q)^2 = 49p^2 + 28pq + 4q^2$$

Level 9 :

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

$$(r + 4) \cdot (r - 4) = r^2 - 16$$

Level 10 :

$$(2e + f) \cdot (2e - f) = 4e^2 - f^2$$

$$(5c + 3d) \cdot (5c - 3d) = 25c^2 - 9d^2$$