

# Ex

$$1) \quad x^2 + 4x + 4 = (x+2)^2$$

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

$$3) \quad x^2 + 4 = X$$

$$4) \quad 25x^2 - 20x + 4 = (5x-2)^2$$

$$5) \quad 100x^2 - 1 = (10x-1)(10x+1)$$

$$6) \quad x^3 + 9x^2 + 27x + 27 = (x+3)^3$$

$$7) \quad x^3 - 27 = (x-3)(x^2 + 3x + 9)$$

$$8) \quad x^3 + 8 = (x+2)(x^2 - 2x + 4)$$

$$9) \quad 8x^3 - 12x^2 + 7x - 1 \quad \neq \quad (2x-1)^3 = 8x^3 - 12x^2 + 6x - 1$$

$\checkmark$   $-3a^2b + 3ab^2$

# Completieren

$$a) \quad 4x^2 + 4x + \underline{\underline{1}} = \left( \underline{\underline{2x}} + \underline{\underline{1}} \right)^2$$

$$b) \quad 4x^2y^2 + \underline{\underline{12xy}} + 9 = \left( \underline{\underline{2xy}} + \underline{\underline{3}} \right)^2$$

$$c) \quad (x + \underline{\underline{8}})(x - \underline{\underline{8}}) = \underline{\underline{x^2}} - 64$$

$$d) \quad x^3 - \underline{\underline{3x^2}} + \underline{\underline{3x}} - 1 = \left( \underline{\underline{x}} - \underline{\underline{1}} \right)^3$$