

# 展開と因数分解の公式

たすき掛け

$$(ax + b)(cx + d) = acx^2 + (ad + bc)x + bd$$

$$(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$$

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

$$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$$

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

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

$$(a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca) = a^3 + b^3 + c^3 - 3abc$$