

Concept B2105) Further Expanding Brackets PART II

When expanding more than two brackets :

Step 1) Simplify and expand any two brackets.

Step 2) Continue expanding the remaining brackets.

Example

Expand $(x-1)(x+2)(2x-3)$.

Expand ()() first,
then expand the remaining two brackets.



Try It Yourself!

Expand the following.

i) $(a-3)(a+1)(2a-5)$

ii) $3(x - 2y)(x + y)(4x - y)$

iii) $(2x + 3)^3$



iv) $(x - \frac{1}{x})^3$

v) $(2x - 3y)^2(3x + y)$



ANSWERS (Try It Yourself!)

i) $2a^3 - 9a^2 + 4a + 15$

ii) $12x^3 - 15x^2y - 21xy^2 + 6y^3$

iii) $8x^3 + 36x^2 + 54x + 27$

iv) $x^3 - 3x + \frac{3}{x} - \frac{1}{x^3}$

v) $12x^3 + 4x^2y - 3xy + 15xy^2 + 9y^3$