

Concept B2103) Difference of Two Squares

Similar to perfect squares, expanding the difference of two squares involve using the distributive law.

$$(a + b)(a - b)$$

$$= \boxed{}^{\boxed{}} - \boxed{} + \boxed{} - \boxed{}^{\boxed{}}$$

$$= \boxed{}^{\boxed{}} - \boxed{}^{\boxed{}}$$

Example

a. Expand $(x + 2)(x - 2)$.



b. Expand $(2x - 3y)(2x + 3y)$.

Try It Yourself!

i) $(x+5)(x-5)$

ii) $(x+12)(x-12)$

iii) $(2-x)(2+x)$

iv) $(7x-4y)(7x+4y)$

v) $(11a-b)(11a+b)$

vi) $x^2 - (x-1)(x+1)$



vii) $2(x-y)(x+y) - y^2$

viii) $3(4x-1)^2 - (4x-1)(4x+1)$

ANSWERS (Try It Yourself!)

i) $x^2 - 25$

ii) $x^2 - 144$

iii) $-x^2 + 4$

iv) $49x^2 - 16y^2$

v) $121a^2 - b^2$

vi) 1

vii) $2x^2 - 3y^2$

viii) $32x^2 - 24x + 4$