EXTEND

MULTIPLYING BRACKETS
DOUBLE BRACKETS

NO CALCULATOR

Ref: G232. **1E1**

A1 Expand $(2x + 7)(x - 5)$	**A2** Expand $(5x + 3)(x + 6)$	**A3** Expand $(4x - 7)(x - 2)$	**A4** Expand $(3x - 5)(x + 4)$
B1 Expand $(2x + 5)(3x + 1)$	**B2** Expand $(3x + 4)(4x - 5)$	**B3** Expand $(3x - 7)(5x + 9)$	**B4** Expand $(2x + 3)(2x - 3)$
C1 Expand $(x + y)(x - y)$	**C2** Expand $(3x - y)(7x + y)$	**C3** Expand $(2x + 5y)(3x - 2y)$	**C4** Expand $(3x + 4y)(3x - 4y)$
D1 Expand $(x + y)^2$	**D2** Expand $(2x + 3)^2$	**D3** Expand $(5x - 2y)^2$	**D4** Expand $(ax + by)^2$
E1 Expand $(x^2 + x + 5)(x + 2)$	**E2** Expand $(x^2 + x - 3)(x - 2)$	**E3** Expand $(x^2 + 2x - 5)(3x + 7)$	**E4** Expand $(x^2 + x - 4)(x^2 - x + 1)$

Worksheets, Interactive Quizzes and Exam Solutions

MULTIPLYING BRACKETS
DOUBLE BRACKETS

NO CALCULATOR

Ref: G232. **1E1**

A1 Expand
$(2x + 7)(x - 5)$

$2x^2 - 10x + 7x - 35$

$2x^2 - 3x - 35$

A2 Expand
$(5x + 3)(x + 6)$

$5x^2 + 30x + 3x + 18$

$5x^2 + 33x + 18$

A3 Expand
$(4x - 7)(x - 2)$

$4x^2 - 8x - 7x + 14$

$4x^2 - 15x + 14$

A4 Expand
$(3x - 5)(x + 4)$

$3x^2 + 12x - 5x - 20$

$3x^2 + 7x - 20$

B1 Expand
$(2x + 5)(3x + 1)$

$6x^2 + 2x + 15x + 5$

$6x^2 + 17x + 5$

B2 Expand
$(3x + 4)(4x - 5)$

$12x^2 - 15x + 16x - 20$

$12x^2 + x - 20$

B3 Expand
$(3x - 7)(5x + 9)$

$15x^2 + 27x - 35x - 63$

$15x^2 - 8x - 63$

B4 Expand
$(2x + 3)(2x - 3)$

$4x^2 - 6x + 6x - 9$

$4x^2 - 9$

C1 Expand
$(x + y)(x - y)$

$x^2 - xy + xy - y^2$

$x^2 - y^2$

C2 Expand
$(3x - y)(7x + y)$

$21x^2 + 3xy - 7xy - y^2$

$21x^2 - 4xy - y^2$

C3 Expand
$(2x + 5y)(3x - 2y)$

$6x^2 - 4xy + 15xy - 10y^2$

$6x^2 + 11xy - 10y^2$

C4 Expand
$(3x + 4y)(3x - 4y)$

$9x^2 - 12xy + 12xy - 16y^2$

$9x^2 - 16y^2$

D1 Expand
$(x + y)^2 = (x + y)(x + y)$

$x^2 + xy + xy + y^2$

$x^2 + 2xy + y^2$

D2 Expand
$(2x + 3)^2 = (2x + 3)(2x + 3)$

$4x^2 + 6x + 6x + 9$

$4x^2 + 12x + 9$

D3 Expand
$(5x - 2y)^2 = (5x - 2y)(5x - 2y)$

$25x^2 - 10xy - 10xy + 4y^2$

$25x^2 - 20xy + 4y^2$

D4 Expand
$(ax + by)^2 = (ax + by)(ax + by)$

$a^2x^2 + abxy + abxy + b^2y^2$

$a^2x^2 + 2abxy + b^2y^2$

E1 Expand $(x^2 + x + 5)(x + 2)$

$x^2(x + 2) + x(x + 2) + 5(x + 2)$

$x^3 + 2x^2 + x^2 + 2x + 5x + 10$

$x^3 + 3x^2 + 7x + 10$

E2 Expand $(x^2 + x - 3)(x - 2)$

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

$x^3 - 2x^2 + x^2 - 2x - 3x + 6$

$x^3 - x^2 - 5x + 6$

E3 Expand $(x^2 + 2x - 5)(3x + 7)$

$x^2(3x + 7) + 2x(3x + 7) - 5(3x + 7)$

$3x^3 + 7x^2 + 6x^2 + 14x - 15x - 35$

$3x^3 + 13x^2 - x - 35$

E4 Expand $(x^2 + x - 4)(x^2 - x + 1)$

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

$x^4 - x^3 + x^2 + x^3 - x^2 + x - 4x^2 + 4x - 4$

$x^4 - 4x^2 + 5x - 4$

Worksheets, Interactive Quizzes and Exam Solutions