

Binomial Products

Bi = 2

nomial = terms

e.g. $(x+6)(x+1) = x^2 + x + 6x + 6$
 $= \underline{x^2 + 7x + 6}$

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

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

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

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

e.g. (i) $(x+2)^2 = x^2 + 2(x)(2) + 2^2$
 $= \underline{x^2 + 4x + 4}$

(ii) $(3x-4)^2 = \underline{9x^2 - 24x + 16}$

(iii) $(2p-5)(2p+5) = \underline{4p^2 - 25}$

2 terms \times 3 terms

\therefore answer has 6 terms

(iv) $(a+2)(a^2-3a+7) = a^3 - 3a^2 + 7a + 2a^2 - 6a + 14$
 $= \underline{a^3 - a^2 + a + 14}$

Exercise 1B; 1ch, 2c, 3be, 5ceg, 7ac, 8b, 9b, 10, 11ace, 13bd, 15*