

Chapter 6



Squares & Square Roots

Examples:

$$(i) (1 \times 3) + 1 = 3 + 1 = 4 = 2^2$$

$$(ii) (3 \times 5) + 1 = 15 + 1 = 16 = 4^2$$

$$\text{In general, } (2n - 1)(2n + 1) = 4n^2 = (2n)^2$$

$$(iii) (2 \times 4) + 1 = 8 + 1 = 9 = 3^2$$

$$(iv) (4 \times 6) + 1 = 24 + 1 = 25 = 5^2$$

$$\text{In general, } (2n)(2n + 2) + 1 = 4n^2 + 4n + 1 = (2n + 1)^2$$

