Q1. Find the following products using suitable identities :

(i) $(x+4)(x+4)$ (ii) $(x+3)(x+3)$ (iii) $(3x+4y)(3x+4y)$ (iv) $(x-5)(x-5)$

(v) $(x-7)(x-7)$ (vi) $(3x-4y)(3x-4y)$ (vii) $\left(2x-\frac{1}{y}\right)\left(2x-\frac{1}{y}\right)$ (viii) $\left(\sqrt{2}x-3y\right)\left(\sqrt{2}x-3y\right)$

(ix) $\left(\frac{x}{2}-\frac{y}{3}\right)\left(\frac{x}{2}-\frac{y}{3}\right)$ (x) $(x+6)(x-6)$ (xi) $(x+9)(x-9)$ (xii) $(2x+3y)(2x-3y)$

(xiii) $(3-2x)(3+2x)$ (xiv) $\left(y^2+\frac{3}{2}\right)\left(y^2-\frac{3}{2}\right)$ (xv) $(x+4)(x+10)$ (xvi) $(x-3)(x+5)$

(xvii) $(x+8)(x-10)$ (xviii) $(3x+4)(3x-5)$

Q2. Evaluate the following products without multiplying directly :

(i) 103×103 (ii) 105×105 (iii) 98×98 (iv) 97×97 (v) 103×107 (vi) 105×106

(vii) 104×96 (viii) 101×99 (ix) 105×95 (x) 211×189 (xi) 213×187

(xii) 95×96 (xiii) 98×94

Q3. Evaluate each of the following using suitable identities :

(i) $(104)^3$ (ii) $(102)^3$ (iii) $(1002)^3$ (iv) $(97)^3$ (v) $(999)^3$ (vi) $(998)^3$ (vii) $(2x+1)^3$

(viii) $(3a+4b)^3$ (ix) $(x-2)^3$ (x) $(5p-3q)^3$ (xi) $(2a-3b)^3$ (xii) $\left(\frac{3}{2}x+1\right)^3$ (xiii) $\left(x-\frac{2}{3}y\right)^3$