

Simplification-Basic

4 - 0 = 4

1. $(78.95)^2 - (43.35)^2 = ?$ SBI PO 2008

✓ a) $4353.88 \Rightarrow 22 = 2+2=4$

✗ b) $4305 \Rightarrow 3$

c) $4235.78 \times$

d) $4148 \times$

78.95 43.35
98.95 43.35 (a)

78.95 0

$78.95 = 7+8+9+5 = 20 = 2+0 = 2 \checkmark$

$= (2)^2 - (6)^2 = 36$

$43.35 = 3+6 = 9 = 0$

$4 - 0$

$= 4 \checkmark$

Digital sum

Sum of digits

✓ $123 \Rightarrow 1+2+3 = 6$

✓ $1234 \Rightarrow 1+2+3+4 = 10 = 1+0 = 1 \checkmark$

✓ $12345 \Rightarrow 1+2+3+4+5 = 15 = 1+5 = 6 \checkmark$

$9 = 0$

$\rightarrow 12 \Rightarrow 1+2 = 3$

$129 \Rightarrow 1+2+9 = 12 = 1+2 = 3$

$1299 \Rightarrow 1+2+9+9 = 21 = 2+1 = 3$

$12999 \Rightarrow 1+2+9+9+9 = 30 = 3+0 = 3$

✓ $9 = 0 \checkmark$

$$Q2. \quad (1 + \underline{20 \times 21 \times 22 \times 23})$$

$$\times (a) \quad 441^2 = (\underline{441})^2 = (0)^2 = 0.$$

$$\times (b) \quad \underline{451^2} \quad (\underline{451})^2 = (1)^2 = 1$$

$$(c) \quad 461^2$$

$$(d) \quad 471^2$$

$$= (1 + \underline{20 \times 21 \times 22 \times 23})$$

$$= (1 + \underline{2 \times 3 \times 4 \times 5})$$

$$= (1 + 30)$$

$$= (1 + 3) = 4 \quad \checkmark$$