

Simplification - Basic

SBI PO 2008

$$(78.95)^2 - (43.35)^2 = ?$$

$$\checkmark (a) \cancel{1383.88} \quad 22 = 2+2=4$$

$$\times (b) \cancel{4305} = 3 \checkmark$$

$$\times (c) \cancel{1738.482} \checkmark$$

$$\times (d) \cancel{9148} \quad 8$$

$$\bullet (78.95)^2 - (43.35)^2$$

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

$$= 4 - 36 \rightarrow 3+6=9=0$$

$$= 4 - 0$$

$$= 4 \checkmark$$

$$= 78.95$$

$$= 20 = 2+0=2$$

$$\Rightarrow \cancel{43.35} \quad 6$$

Decimal✓ Digital sum ✓Sum of digits:

$$\bullet \checkmark 123 = 1+2+3 = 6 \checkmark$$

$$\wedge \checkmark 1234 = 1+2+3+4 = 10$$

$$1+0 = 1$$

$$\checkmark \underline{342 = 3+4+2 = 9}$$

$$119 = 11 = 1+1 = 2 \checkmark$$

$$1199 = 20 = 2+0 = 2 \checkmark$$

$$11999 = 29 = 2+9 = 11 = 1+1 = 2$$

$$!!9999 = 38 = 3+8$$

$$= 11 = 1+1 = 2 \checkmark$$

$$\checkmark \boxed{9=0}$$

Q2. $(1 + 20 \times 21 \times 22 \times 23)$

~~(a) $44!^2$~~

~~(b) $45!^2$~~

~~(c) $46!^2$~~

(d) $47!^2$

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

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

$= (1 + 120)$

$= (1 + 3)$

$= \underline{\underline{4}}$ ✓

Digital.

(a) $(49!)^2$ $(9)^2 = 0^2 = 0$

b $(45!)^2 = 1^2 = 1$

$(46!)^2 = (11)^2 = (2)^2 = \underline{\underline{4}}$

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