. A shopkeeper sold an article for Rs. 2564.36. Approximately what was his profit percent of the cost price of the article was Rs. 2400.

(a) 4% (b) 5% (c) 6% (d) 7% (e) None of these

S.P = 2564.36 rs ✓

% profit = ?

CP = 2400 rs ✓

$\% \text{ Profit} = \frac{\text{Profit}}{CP} \times 100$

$\frac{164.36}{2400} \times 100 = 7$

7% ✓

Profit = SP - CP ✓

= 2564.36
 2400.00
 164.36 ✓

Cost price

$\boxed{\% \text{ profit} = \frac{\text{Profit}}{CP} \times 100}$

$\boxed{\% \text{ loss} = \frac{\text{Loss}}{CP} \times 100}$

Pen = 10 rs = C.P ✓
= 15 rs = S.P ✓

Profit = 15 - 10 = 5 rs

$\boxed{\text{Profit} = SP - CP}$ ✓

Pen = 10 rs = CP ✓
8 rs = SP ✓

loss = 10 - 8 = 2

$\boxed{\text{Loss} = CP - SP}$ ✓

Q2. A book was sold for Rs. 27.50 with a profit of 10%. If it were sold for Rs. 25.75, then would have been percentage of profit and loss.

(a) 2% profit (b) 3% profit (c) 2% loss (d) 3% ~~profit~~ loss (e) None of these

✓ $SP_1 = 27.50$ rs

✓ % $Profit_1 = 10\%$

$CP = ?$ ✓

$$SP = CP \times \frac{(100 + \%\,profit)}{100}$$

$$27.5 = CP \times \frac{110}{100}$$

$CP = 2.5 \times 10$

$\boxed{CP = 25\text{ rs}}$

$\frac{25 \times 10}{100} = 2.5$

$25 + 2.5 = 27.5$ ✓

$cp = 22 \times \frac{10}{100}$ = 22

$S.P_1 = 25.75$ ✓, CP ✓ $= 25$ rs

% profit or ~~% loss~~ : ?

Profit = SP − CP

= 25.75 − 25

= 0.75 rs.

$$SP = CP \times \frac{(100 + \%\,profit)}{100}$$ ✓

$$SP = CP \times \frac{(100 - \%\,loss)}{100}$$

$$\%\,Profit = \frac{Profit}{cp} \times 100$$

$$= \frac{0.75}{25} \times 100 = 3\%$$