C.P.

Profit ~~~ ~ Loss

PROFIT & LOSS

By A. Ratan

C.P   ♡ Investment   S.P.   Return   MP.   ⇄   ~~M.P.~~

Profit   Loss   Discount   Marked

P%   L%   D%   Labelled

$$P \leftarrow S.P > C.P$$

$$L \leftarrow S.P < C.P$$

$$No\, P\, No\, L \leftarrow S.P = C.P$$

List

Tagged

Profit and Loss

Note:

Profit or loss percentage is to be applied always to the Cost Price only.

Discount percentage is to be applied always to the Marked Price only.

S.P. $>$ C.P

= Profit

$$\frac{S.P}{C.P} > 1$$

S.P. $<$ C.P.

= Loss

$$\frac{S.P}{C.P} < 1$$

S.P. $=$ C.P.

= No Profit No Loss

$$\frac{S.P}{C.P} = 1$$

SP
CP

Question:

If cost price and selling price are in the ratio 8:5, then find the profit% or loss%.

$$37.5\% \ Loss$$

$$\boxed{\frac{S.P.}{C.P}} = \frac{5}{8}$$

$$= 0.625$$

$$0.375$$

Question:

A Fruit seller purchases 11 orange for Rs. 10 and sells 10 orange for Rs. 11. Find his profit or loss%?

$21\%\ P$

$10\%\ P \quad 10\%\ P$

$1.1 \times 1.1 = 1.21\ P$

$\dfrac{11}{10} \times \dfrac{11}{10}$

$= \dfrac{121}{100} = 1.21$

$\dfrac{S.P}{C.P}$

$C.P. = \dfrac{10}{11}$

$S.P = \dfrac{11}{10}$

Question: on

A milk vendor purchases milk at Rs. 36/ litre, and sells at Rs. 30/ litre. For every 1 litre milk he adds 200ml. of water. While selling milk he cheats 200ml. in 1 liter measurement. Find his Profit or Loss percentage.

$$\frac{S.P}{C.P}$$

$$25\%.P$$

$$\frac{\overset{5}{\cancel{30}}}{\cancel{36}} \times \frac{\overset{\overset{1}{\cancel{2}}}{\cancel{1200}}}{\cancel{1000}} \times \frac{\cancel{1000}}{\cancel{800}}$$

$$= \frac{5}{4} = 1.25 \qquad 2 \qquad 2$$

$£45$

1.5

$\underline{\underline{1000ml}} \rightarrow £ \ 36$

$£ 30$

$\underline{\underline{1200ml}}$

$\dfrac{9}{36} \times \dfrac{1}{4}$

Demand   Delivery

1000ml   800

1500   1200

$25\% \ P$

Question:
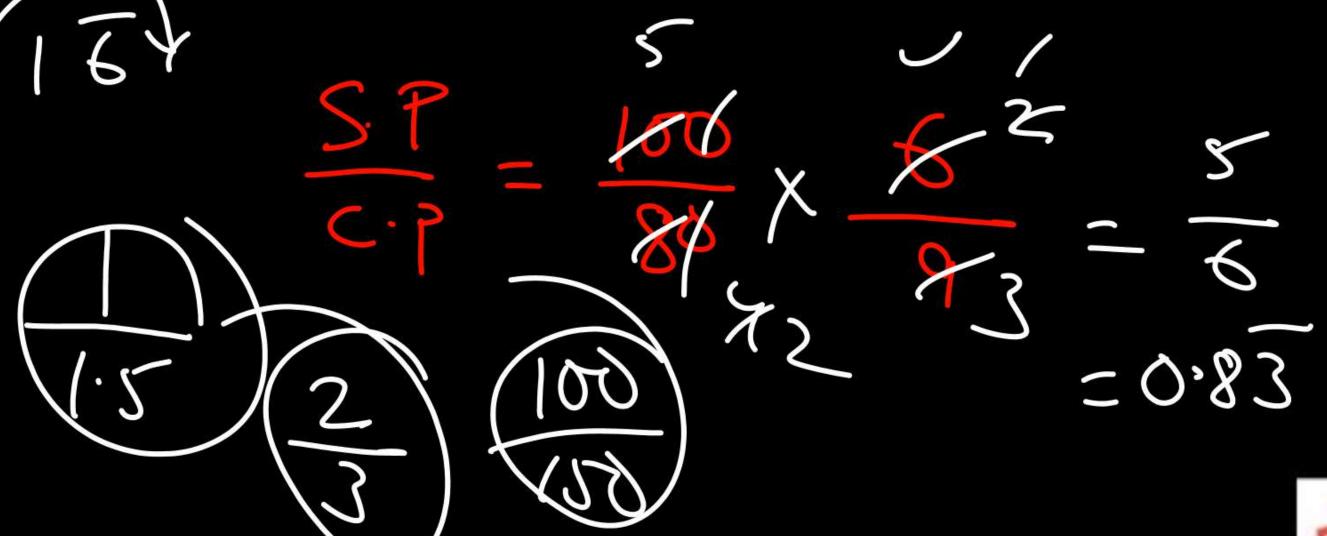
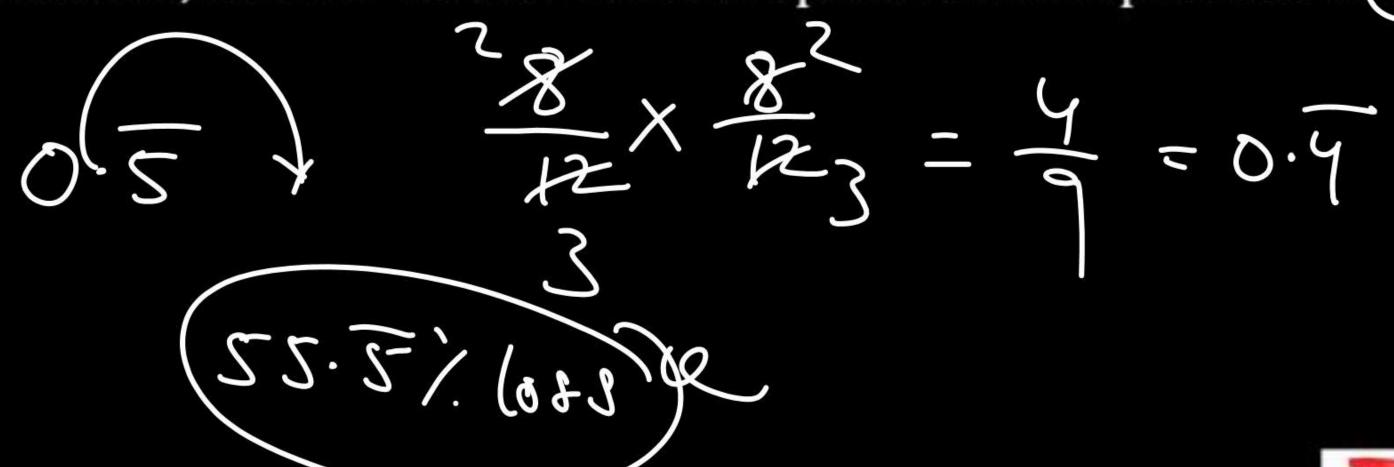$16.\overline{6}\%\ loss$ OR $16\frac{2}{3}\%\ loss$

A cloth merchant purchases cloth at ₹80/meter and sells at ₹100/meter. As a festive offer, he gives 50% extra free on every demand. Find his proft% or loss%.

$0.1\overline{6}$

$$\frac{S.P}{C.P} = \frac{\overset{5}{\cancel{100}}}{\cancel{80}} \times \frac{\overset{2}{\cancel{6}}^{2}}{\cancel{9}3} = \frac{5}{6} = 0.8\overline{3}$$

$\times 2$

$\frac{1}{1.5}$ $\frac{2}{3}$ $\frac{100}{150}$

Question:

Due to downfall in the market, 'A' sells mangoes to 'B' saying "FOR EVERY 12 MANGOES, COUNT AS 8". Due to overnight demand, 'A' took his mangoes back from 'B' saying " FOR EVERY 8 MANGOES, COUNT AS 12". Find the profit or loss percent of 'A'.

$$0.\overline{5} \rightarrow \frac{\overset{2}{8}}{\cancel{12}} \times \frac{\overset{2}{8}}{\underset{3}{\cancel{12}}} = \frac{4}{9} = 0.\overline{4}$$

$$55.\overline{5}\% \text{ loss}$$

Note:

A trader may sometimes have multiple profits or losses simultaneously. This is equivalent to having multiple changes and so all individual changes are to be multiplied to get the overall effect.

Question:
  If selling price is doubled, the value of loss percent changes to profit percent. Find the value of loss% or profit%.

A man sells an article at a profit of 20%. If he had bought it at 10% less and sold it for Rs. 18 more, he would have gained 40%. Find the cost price of the article.

Thank you