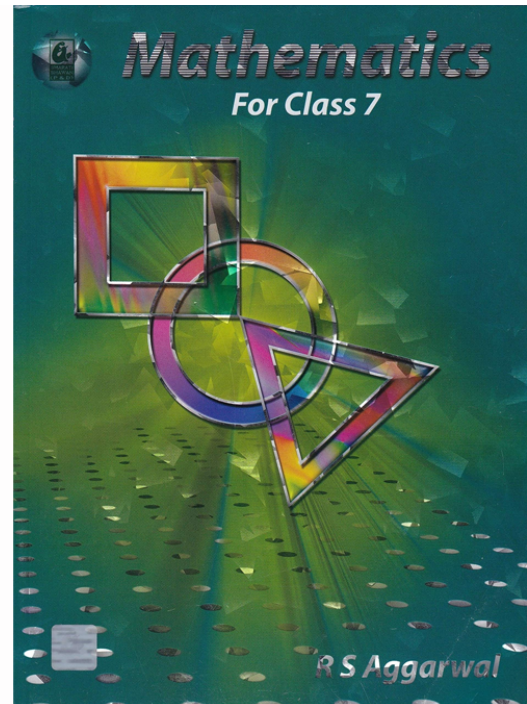


RS Aggarwal Solutions for Class 7 Maths Chapter 11 – Profit and Loss

Class 7 - Chapter 11 Profit and Loss



For any clarifications or questions you can write to info@indcareer.com

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RS Aggarwal Solutions for Class 7 Maths Chapter 11 – Profit and Loss

Class 7: Maths Chapter 11 solutions. Complete Class 7 Maths Chapter 11 Notes.

RS Aggarwal Solutions for Class 7 Maths Chapter 11–Profit and Loss

RS Aggarwal 7th Maths Chapter 11, Class 7 Maths Chapter 11 solutions

Ex 11A

Question 1.

Solution:

(i) C.P. = Rs. 950

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$$\therefore \text{S.P.} = \frac{\text{C.P.} \times (100 + \text{gain}\%)}{100}$$

$$= \frac{9600 \times \left(100 + \frac{50}{3}\right)}{100}$$

$$= \frac{9600 \times 350}{100 \times 3} = \text{Rs. } 11200 \text{ Ans.}$$

$$\text{gain \%} = 6\%$$

$$\therefore \text{S.P.} = \frac{\text{C.P.} \times (100 + \text{gain}\%)}{100}$$

$$= \frac{950 (100 + 6)}{100} = \frac{950 \times 106}{100}$$

$$= \text{Rs. } 1007 \text{ Ans.}$$

$$(ii) \text{ C.P.} = \text{Rs. } 9600$$

$$\text{gain}\% = 16\frac{2}{3}\%$$

$$(iv) \text{ C.P.} = \text{Rs. } 8640$$

$$\text{Loss} = 12\frac{1}{2} = \frac{25}{2}\%$$

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

$$= \text{Rs. } \frac{8640 \times \left(100 - \frac{25}{2}\right)}{100}$$

$$= \text{Rs. } \frac{8640 \times 175}{2 \times 100} = \text{Rs. } 7560$$

$$(iii) \text{ CP} = \text{Rs. } 1540$$

$$\text{Loss} = 4\%$$

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

$$= \frac{1540 \times (100 - 4)}{100} = \frac{1540 \times 96}{100}$$

$$= \text{Rs. } 1478.40$$

Question 2.

Solution:

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(i) CP = Rs. 2400

SP = Rs. 2592

Gain = SP – CP = Rs. 2592 – Rs. 2400 = Rs. 192

$$\therefore \text{Gain \%} = \frac{\text{Total gain} \times 100}{\text{CP}}$$

$$= \frac{192 \times 100}{2400} = 8\%$$

(ii) CP = Rs. 1650

SP = Rs. 1452

$\therefore$ Loss = CP – SP

= Rs. 1650 – Rs. 1452 = Rs. 198

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

$$= \frac{198 \times 100}{1650} = 12\%$$

(iii) CP = Rs. 12000

SP = Rs. 12800

$\therefore$ Gain = SP – CP = Rs. 12800 – Rs. 12000

= Rs. 800

$$\text{Gain \%} = \frac{\text{Total gain} \times 100}{\text{CP}}$$

$$= \frac{800 \times 100}{12000} = \frac{20}{3} \% = 6\frac{2}{3} \%$$

(iv) CP = Rs. 1800

SP = Rs. 1611

$\therefore$ Loss = CP – SP = 1800 – 1611
= Rs. 189

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

$$= \frac{189 \times 100}{1800} = \frac{21}{2} \% \\ = 10.5\%$$

Question 3.

Solution:

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(i) S.P. = Rs. 924

Gain% = 10%

$$\therefore \text{C.P.} = \frac{\text{S.P.} \times 100}{100 + \text{gain}\%} = \text{Rs. } \frac{924 \times 100}{100 + 10}$$

$$= \text{Rs. } \frac{924 \times 100}{110} = \text{Rs. } 840$$

(ii) S.P. = Rs. 1755

$$\text{Gain}\% = 12\frac{1}{2}\% = \frac{25}{2}\%$$

$$\therefore \text{C.P.} = \frac{\text{S.P.} \times 100}{100 + \text{gain}\%} = \frac{1755 \times 100}{100 + \frac{25}{2}}$$

$$= \text{Rs. } \frac{1755 \times 100}{\frac{200 + 25}{2}} = \frac{1755 \times 100 \times 2}{225}$$

$$= \text{Rs. } \frac{195 \times 4 \times 2}{1} = \text{Rs. } 1560$$

(iii) SP = Rs. 8510

Loss = 8%

$$\therefore \text{CP} = \frac{\text{SP} \times 100}{100 - \text{loss}\%} = \frac{8510 \times 100}{100 - 8}$$

$$= \text{Rs. } \frac{8510 \times 100}{92} = \text{Rs. } 9250$$

(iv) SP = Rs. 5600

$$\text{Loss} = 6\frac{2}{3}\% = \frac{20}{3}\%$$

$$\therefore \text{CP} = \frac{\text{SP} \times 100}{100 - \text{loss}\%} = \text{Rs. } \frac{5600 \times 100}{100 - \frac{20}{3}} = \text{Rs. } \frac{5600 \times 100 \times 3}{280} = \text{Rs. } 6000$$

Question 4.

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Solution:

C.P. of an almirah = Rs. 13600

Amount spent on transportation = Rs. 400

Total cost price (CP) = Rs. 13600 + Rs. 400 = Rs. 14000

SP = Rs. 16800

Total gain = SP – CP

= Rs. 16800 – Rs. 14000 = Rs. 2800

$$\begin{aligned}\therefore \text{Gain\%} &= \frac{\text{Total gain} \times 100}{\text{CP}} \\ &= \frac{2800 \times 100}{14000} = 20\%\end{aligned}$$

Question 5.**Solution:**

CP of an old house = Rs. 765000

Amount spent on repairs = Rs. 115000

Total cost price (CP) = Rs. 765000 + Rs. 115000 = Rs. 880000

Gain = 5%

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$$\begin{aligned}\therefore \text{SP of the house} &= \frac{\text{CP} \times (100 + \text{gain}\%)}{100} \\ &= \frac{880000 \times (100 + 5)}{100} \\ &= \text{Rs. } \frac{880000 \times 105}{100} \\ &= \text{Rs. } 924000\end{aligned}$$

Question 6.

Solution:

CP of 1 dozen or 12 lemons = Rs. 25

SP of 5 lemons = Rs. 12

$$\begin{aligned}\therefore \text{SP of 12 lemons} &= \text{Rs. } \frac{12 \times 12}{5} \\ &= \text{Rs. } \frac{144}{5} = \text{Rs. } 28.80 \\ \text{Gain} &= \text{SP} - \text{CP} = \text{Rs. } 28.80 - \text{Rs. } 25 \\ &= \text{Rs. } 3.80 \\ \therefore \text{Gain}\% &= \frac{\text{Total gain} \times 100}{\text{CP}} \\ &= \frac{3.80 \times 100}{25} = 15.2\% \\ &= 15.2\%\end{aligned}$$

Question 7.

Solution:

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SP of 12 pens = CP of 15 pens

Let CP of 1 pen = Re. 1

The CP of 15 pens = Rs. 15

and SP of 12 pens = Rs. 12

$$\therefore \text{SP of 1 pen} = \text{Rs. } \frac{15}{12} = \text{Rs. } \frac{5}{4}$$

$$\therefore \text{Gain} = \text{SP} - \text{CP} = \text{Rs. } \frac{5}{4} - 1 = \text{Rs. } \frac{1}{4}$$

$$\text{Gain\%} = \frac{\text{Gain} \times 100}{1} = \frac{\frac{1}{4} \times 100}{1} \%$$

$$= \frac{25}{1} \% = 25\%$$

Question 8.

Solution:

SP of 16 spoons = CP of 15 spoons

Let CP of 1 spoon = Re. 1

Then CP of 15 spoons = Rs. 15

and SP of 16 spoons = Rs. 15

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$$\text{Then SP of 1 spoon} = \text{Rs. } \frac{15}{16}$$

$$\therefore \text{Loss} = \text{CP} - \text{SP}$$

$$= 1 - \frac{15}{16} = \text{Rs. } \frac{1}{16}$$

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

$$= \frac{\frac{1}{16} \times 100}{1} = \frac{100}{16}\%$$

$$= \frac{25}{4}\% = 6\frac{1}{4}\%$$

Question 9.

Solution:

For Manoj

CP of video = Rs. 12000

Gain = 10%

$$\therefore \text{SP of video} = \frac{\text{CP} \times (100 + \text{gain}\%)}{100}$$

$$= \frac{12000 \times (100 + 10)}{100}$$

$$= \text{Rs. } \frac{12000 \times 110}{100} = \text{Rs. } 13200$$

or CP for Rahul = Rs. 13200

Loss = 5%

$$\therefore \text{SP for Rahul} = \frac{13200 \times (100 - 5)}{100}$$

$$= \text{Rs. } \frac{13200 \times 95}{100} = \text{Rs. } 12540$$

$\therefore$ CP for Rakesh = Rs. 12540

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Question 10.**Solution:**

SP of sofa set = Rs. 21600

Gain = 8%

$$\begin{aligned} \text{CP} &= \frac{\text{SP} \times 100}{100 + \text{gain}\%} = \frac{21600 \times 100}{100 + 8} \\ &= \text{Rs. } \frac{21600 \times 100}{108} = \text{Rs. } 20000 \end{aligned}$$

Question 11.**Solution:**

SP of a watch = Rs. 11400

Loss = 5%

$$\begin{aligned} \therefore \text{CP of the watch} &= \frac{\text{SP} \times 100}{100 - \text{loss}\%} \\ &= \text{Rs. } \frac{11400 \times 100}{100 - 5} \\ &= \text{Rs. } \frac{11400 \times 100}{95} = \text{Rs. } 12000 \end{aligned}$$

Question 12.**Solution:**

SP of calculator = Rs. 1325

Gain = 6%

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$$= \text{Rs. } \frac{1325 \times 100}{106} = \text{Rs. } 1250$$

In second case, gain = 12%

∴ SP of the calculator

$$= \frac{\text{CP} \times (100 + \text{gain}\%)}{100}$$

$$= \text{Rs. } \frac{1250 \times (100 + 12)}{100}$$

$$\therefore \text{CP} = \frac{\text{SP} \times 100}{100 + \text{gain}\%} = \text{Rs. } \frac{1325 \times 100}{100 + 6}$$

$$= \text{Rs. } \frac{1250 \times 112}{100} = \text{Rs. } 1400$$

Question 13.

Solution:

SP of computer = Rs. 24480

Loss = 4%

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$$\begin{aligned}\therefore \text{CP} &= \frac{\text{SP} \times 100}{100 - \text{loss}\%} \\ &= \text{Rs. } \frac{24480 \times 100}{100 - 4} = \text{Rs. } \frac{24480 \times 100}{96} \\ &= \text{Rs. } 25500 \\ \text{In second case,} \\ \text{Gain} &= 4\% \\ \therefore \text{SP of the computer} \\ &= \frac{\text{CP} \times (100 + \text{gain}\%)}{100} \\ &= \text{Rs. } \frac{25500 \times (100 + 4)}{100} \\ &= \text{Rs. } \frac{25500 \times 104}{100} = \text{Rs. } 26520\end{aligned}$$

Question 14.**Solution:**

In first case gain = 15%

and in second case, gain = 20%

Difference = 20 - 15 = 5%

Now 5% of the CP = Rs. 108

CP = 108 × 1005 = Rs. 2160

Question 15.**Solution:**

In first case, loss = 8%

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and in second case gain = 6%

Difference = 8 + 6 = 14%

Now 14% of CP = Rs. 3360

CP = Rs. 3360 $\times$ 100 / 14 = Rs. 24000

Question 16.

Solution:

SP of first cycle = Rs. 2376

Gain = 10%

$$\therefore \text{CP of first cycle} = \frac{\text{SP} \times 100}{100 + \text{gain\%}}$$

$$= \text{Rs. } \frac{2376 \times 100}{100 + 10} = \text{Rs. } \frac{2376 \times 100}{110}$$

$$= \text{Rs. } 2160$$

In second case,

SP of second cycle = Rs. 2376

and loss = 10%

$$\therefore \text{CP of second cycle} = \text{Rs. } \frac{2376 \times 100}{100 - 10}$$

$$= \text{Rs. } \frac{2376 \times 100}{90} = \text{Rs. } 2640$$

$$\therefore \text{Total SP of two cycle} = \text{Rs. } 2376 \times 2$$

$$= \text{Rs. } 4752$$

$$\text{and CP} = 2160 + 2640 = \text{Rs. } 4800$$

$$\text{Loss} = \text{CP} - \text{SP} = \text{Rs. } 4800 - 4752$$

$$= \text{Rs. } 48$$

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

$$= \frac{48 \times 100}{4800} = 1\%$$

Question 17.

Solution:

SP of an exhaust fan = Rs. 7350

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$$\text{Gain} = \frac{1}{6} \text{ of CP}$$

$$\text{Let CP} = \text{Rs. } x$$

$$\text{Then gain} = \frac{1}{6} \text{ of } x = \text{Rs. } \frac{x}{6}$$

$$\therefore \text{SP} = x + \frac{x}{6} = \frac{7x}{6}$$

$$\text{Now } \frac{7x}{6} = 7350$$

$$\Rightarrow x = \frac{7350 \times 6}{7} = \text{Rs. } 1050 \times 6$$

$$= \text{Rs. } 6300$$

Cost price of the fan = Rs. 6300

Question 18.

Solution:

Let CP of watch for Mohit = Rs. 100

Gain = 10%

SP for Mohit = Rs. 100 + 10 = Rs. 110

CP for Karim = Rs. 110

Gain = 4%

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$$\text{SP for Karim} = \text{Rs. } \frac{110 \times (100 + 4)}{100}$$

$$= \text{Rs. } \frac{110 \times 104}{100} = \text{Rs. } \frac{1144}{10}$$

$$\text{or CP for Rahim is Rs. } \frac{1144}{10}, \text{ then CP}$$

for Mohit = Rs. 100

and if CP for Rahim is Rs. 14300, then

$$\text{CP Mohit} = \text{Rs. } \frac{100 \times 14300 \times 10}{1144}$$

$$= \text{Rs. } 12500$$

Question 19.

Solution:

Retail price or S.P. of the machine for retailer = Rs. 37950

Gain = 25%

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$$\therefore \text{C.P. for retailer} = \frac{\text{S.P.} \times 100}{100 + \text{gain}}$$

$$= \text{Rs. } \frac{37950 \times 100}{100 + 25}$$

$$= \text{Rs. } \frac{37950 \times 100}{125} = \text{Rs. } 30360$$

or S.P. for wholesaler = Rs. 30360

Gain 15%

$$\therefore \text{C.P. for wholesaler} = \text{Rs. } \frac{30360 \times 100}{100 + 15}$$

$$= \text{Rs. } \frac{30360 \times 100}{115} = \text{Rs. } 26400$$

or S.P. of the manufacturer = Rs. 26400

Gain = 10%

$\therefore$ C.P. or cost of production

$$= \text{Rs. } \frac{26400 \times 100}{100 + 10}$$

$$= \text{Rs. } \frac{26400 \times 100}{110} = \text{Rs. } 24000$$

Question 20.

Solution:

CP of video = Rs. 20000

and CP of television = Rs. 30000

Loss on video = 5%

and gain on TV = 8%

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$$\begin{aligned}\therefore \text{SP of video} &= \frac{\text{CP} \times (100 - \text{loss}\%)}{100} \\ &= \text{Rs. } \frac{20000 \times (100 - 5)}{100} \\ &= \text{Rs. } \frac{20000 \times 95}{100} = \text{Rs. } 19000 \\ \text{and SP of TV} &= \text{Rs. } \frac{30000 \times (100 + 8)}{100} \\ &= \text{Rs. } \frac{30000 \times 108}{100} = \text{Rs. } 32400\end{aligned}$$

Total CP of video and TV = Rs. 20000 + 30000 = Rs. 50000

and SP of video and TV = Rs. 19000 + 32400 = Rs. 51400

Gain = SP – CP = Rs. 51400 – 50000 = Rs. 1400

$$\begin{aligned}&= \frac{1400 \times 100}{50000} = \frac{14}{5} \% \\ \text{Gain}\% &= \frac{\text{Gain} \times 100}{\text{CP}} = 2\frac{4}{5} = 2.8\%\end{aligned}$$

Question 21.

Solution:

SP of 36 oranges = CP of 36 oranges – loss = CP of 36 oranges – SP of 4 oranges

$\Rightarrow$ SP of 36 oranges + SP of 4 oranges = CP of 36 oranges

$\Rightarrow$ SP of 40 oranges = CP of 36 oranges

Let CP of each orange = Re. 1

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CP of 36 oranges = Rs. 36

and SP of 40 of 40 oranges = Rs. 36

$$\text{and SP of 1 orange} = \text{Rs. } \frac{36}{40} = \text{Rs. } \frac{9}{10}$$

$$\therefore \text{Loss} = \text{CP} - \text{SP} = 1 - \frac{9}{10} = \text{Rs. } \frac{1}{10}$$

$$\begin{aligned}\text{Loss}\% &= \frac{\text{Loss} \times 100}{\text{CP}} = \frac{\frac{1}{10} \times 100}{1} \\ &= 10\%\end{aligned}$$

Question 22.

Solution:

We know that C.P. = S.P. – gain

C.P. of 8 dozen pencils = S.P. of 8 dozen pencils – S.P. of 1 dozen pencils

= S.P. of 7 dozen pencils = Rs. 100 (suppose)

C.P. of 1 dozen = Rs.1008

and S.P. of 1 dozen = Rs. $\frac{100}{7}$

$$\text{Gain} = \text{S.P.} - \text{C.P.} = \text{Rs. } \frac{100}{7} - \text{Rs. } \frac{100}{8}$$

$$= \frac{800 - 700}{56} = \text{Rs. } \frac{100}{56}$$

$$\text{Gain\%} = \frac{\text{gain} \times 100}{\text{C.P.}} = \frac{\frac{100}{56} \times 100}{\frac{100}{8}}$$

$$= \frac{100 \times 100 \times 8}{56 \times 100} = \frac{100}{7} = 14\frac{2}{7}\%$$

Ex 11B

Objective Questions :

Mark (✓) against the correct answer in each of the following :

Question 1.

Solution:

(b)

C.P. = Rs. 80

S.P. = Rs. 100

Gain = S.P. – C.P. = Rs. 100 – 80 = Rs. 20

$$\begin{aligned}\therefore \text{Gain\%} &= \frac{\text{gain} \times 100}{\text{C.P.}} = \frac{20 \times 100}{80} \\ &= 25\%\end{aligned}$$

Question 2.

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Solution:

(a)

C.P. = Rs. 120

S.P. = Rs. 105

Loss = C.P. – S.P. = Rs. 120 – 105 = Rs. 15

$$\therefore \text{Loss\%} = \frac{15 \times 100}{120} = \frac{25}{2}\% = 12\frac{1}{2}\%$$

Question 3.

Solution:

(b)

S.P. = Rs. 100

Gain = Rs. 20

C.P. = S.P. – gain = Rs. 100 – 20 = Rs. 80

$$\text{Gain\%} = \frac{\text{gain} \times 100}{\text{C.P.}} = \frac{20 \times 100}{80} = 25\%$$

Question 4.

Solution:

(a)

S.P. = Rs. 198

Gain = 10%

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$$\begin{aligned}\therefore \text{C.P.} &= \frac{\text{S.P.} \times 100}{100 + \text{gain}\%} \\ &= \frac{198 \times 100}{100 + 10} = \frac{198 \times 100}{110} \\ &= \text{Rs. } 180\end{aligned}$$

Question 5.**Solution:**

(a)

First S.P. of jug = Rs. 144

Loss = 17 of C.P.

Let C.P. = x

$$\text{Then S.P.} = x - \frac{1}{7}x = \frac{6}{7}x$$

$$\therefore \frac{6}{7}x = 144$$

$$\Rightarrow x = \frac{144 \times 6}{8} = 24 \times 7 = \text{Rs. } 168$$

$$\therefore \text{C.P.} = \text{Rs. } 168$$

Second S.P. = Rs. 189

$$\text{Gain} = \text{S.P.} - \text{C.P.} = 189 - 168 = \text{Rs. } 21$$

$$\text{Gain}\% = \frac{\text{gain} \times 100}{\text{C.P.}} = \frac{21 \times 100}{168} = 12.5\%$$

$$\text{Gain}\% = 12.5\%$$

Question 6.**Solution:**

(d)

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First S.P. of a pen = Rs. 48

Loss = 20%

$$\begin{aligned}\therefore \text{C.P.} &= \frac{\text{S.P.} \times 100}{100 - \text{loss}\%} = \frac{48 \times 100}{100 - 20} \\ &= \frac{48 \times 100}{80} = \text{Rs. } 60\end{aligned}$$

Gain = 20%

$$\begin{aligned}\text{then S.P. will be} &= \frac{\text{C.P.} \times (100 + \text{gain}\%)}{100} \\ &= \frac{60 \times (100 + 20)}{100} \\ &= \frac{60 \times 120}{100} = \text{Rs. } 72\end{aligned}$$

Question 7.

Solution:

(a)

C.P. of 12 pencils = S.P. of 15 pencils = Re 1 (suppose)

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$$\therefore \text{C.P. of 1 pencil} = \text{Rs. } \frac{1}{12}$$

$$\text{and S.P. of 1 pencil} = \text{Rs. } \frac{1}{15}$$

$$\begin{aligned}\therefore \text{Loss} &= \text{C.P.} - \text{S.P.} = \frac{1}{12} - \frac{1}{15} \\ &= \frac{5-4}{60} = \text{Rs. } \frac{1}{60}\end{aligned}$$

$$\begin{aligned}\therefore \text{Loss\%} &= \frac{\text{Loss} \times 100}{\text{C.P.}} = \frac{\frac{1}{60} \times 100}{\frac{1}{12}} \\ &= \frac{1 \times 100 \times 12}{60 \times 1} = 20\%\end{aligned}$$

Question 8.**Solution:**

(d)

Let CP of 4 toffees = SP of 3 toffee = Rs. 12

(LCM of 4, 3 = 12)

CP of 1 toffee = Rs. $\frac{12}{4}$ = Rs. 3

SP of 1 toffee = Rs. $\frac{12}{3}$ = 4

Gain = Rs. 4 – 3 = Re 1

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$$\text{Gain}\% = \frac{\text{Gain} \times 100}{\text{CP}} = \frac{1 \times 100}{3}$$

$$= 33\frac{1}{3}\%$$

Question 9.

Solution:

(c) SP of an article = Rs. 144

Loss% = 10%

$$\therefore \text{CP} = \frac{\text{SP} \times 100}{100 - \text{loss}\%} = \frac{144 \times 100}{100 - 10}$$

$$= \frac{144 \times 100}{90} = \text{Rs. } 160$$

Gain = 10%

$$\text{SP} = \frac{\text{CP} \times (100 + \text{gain}\%)}{100}$$

$$= \frac{160(100 + 10)}{100} = \text{Rs. } \frac{160 \times 110}{100}$$

$$= \text{Rs. } 176$$

Question 10.

Solution:

(a)

CP of 6 lemons = Re 1

CP of 1 lemon = Re 16

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SP of 4 lemons = Re 1

SP of 1 lemon = Re 14

$$\begin{aligned}\therefore \text{Gain} &= \text{SP} - \text{CP} = \frac{1}{4} - \frac{1}{6} \\ &= \frac{3-2}{12} = \text{Rs. } \frac{1}{12} \\ \therefore \text{Gain\%} &= \frac{\text{Gain} \times 100}{\text{CP}} \\ &= \frac{\frac{1}{12} \times 100}{\frac{1}{6}} = \frac{100 \times 6}{12} = 50\%\end{aligned}$$

Question 11.

Solution:

(d)

SP of chair = Rs. 720

Gain% = 20%

$$\begin{aligned}\therefore \text{CP} &= \frac{\text{SP}(100)}{100 + \text{gain\%}} = \text{Rs. } \frac{720 \times 100}{100 + 20} \\ &= \text{Rs. } \frac{720 \times 100}{120} = \text{Rs. } 600\end{aligned}$$

Question 12.

Solution:

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(c)

SP of stool = Rs. 630

Loss% = 10%

$$\begin{aligned}\text{CP} &= \frac{\text{SP} \times 100}{100 - \text{loss}\%} = \frac{630 \times 100}{100 - 10} \\ &= \text{Rs. } \frac{630 \times 100}{90} = \text{Rs. } 700\end{aligned}$$



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- Chapter 1–Integers
- Chapter 2–Fractions
- Chapter 3–Decimals
- Chapter 4–Rational Numbers
- Chapter 5–Exponents
- Chapter 6–Algebraic Expressions
- Chapter 7–Linear Equations in One Variable
- Chapter 8–Ratio and Proportion
- Chapter 9–Unitary Method
- Chapter 10–Percentage
- Chapter 11–Profit and Loss
- Chapter 12–Simple Interest
- Chapter 13–Lines and Angles
- Chapter 14–Properties of Parallel Lines
- Chapter 15–Properties of Triangles
- Chapter 16–Congruence
- Chapter 17–Constructions
- Chapter 18–Reflection and Rotational Symmetry
- Chapter 19–Three-Dimensional Shapes
- Chapter 20–Mensuration
- Chapter 21–Collection and Organisation of Data (Mean, Median and Mode)
- Chapter 22–Bar Graphs
- Chapter 23–Probability

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He was born on January 2, 1946 in a village of Delhi. He graduated from Kirori Mal College, University of Delhi. After completing his M.Sc. in Mathematics in 1969, he joined N.A.S. College, Meerut, as a lecturer. In 1976, he was awarded a fellowship for 3 years and joined the University of Delhi for his Ph.D. Thereafter, he was promoted as a reader in N.A.S. College, Meerut. In 1999, he joined M.M.H. College, Ghaziabad, as a reader and took voluntary retirement in 2003. He has authored more than 75 titles ranging from Nursery to M. Sc. He has also written books for competitive examinations right from the clerical grade to the I.A.S. level.

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