

**Question:1**

Find the SP when:

*i* CP = Rs 950, gain = 6%

*ii* CP = Rs 9600, gain =  $16\frac{2}{3}\%$

*iii* CP = Rs 1540, loss = 4%

*iv* CP = Rs 8640, loss =  $12\frac{1}{2}\%$

**Solution:**

*i* CP = Rs. 950

Gain = 6%

$$SP = \left\{ \frac{(100 + \text{Gain } \%)}{100} \times CP \right\} = \left\{ \frac{(100 + 6)}{100} \times 950 \right\} = \frac{106}{100} \times 950 = \frac{100700}{100} = \text{Rs. } 1007$$

*ii* CP = Rs. 9600

Gain =  $16\frac{2}{3}\% = \frac{50}{3}\%$

$$SP = \left\{ \frac{(100 + \text{Gain } \%)}{100} \times CP \right\} = \left\{ \frac{\left(100 + \frac{50}{3}\right)}{100} \times 9600 \right\} = \frac{350}{300} \times 9600 = \frac{3360}{3} = \text{Rs. } 11200$$

*iii* CP = Rs. 1540

Loss = 4%

$$SP = \left\{ \frac{(100 - \text{Loss } \%)}{100} \times CP \right\} = \left\{ \frac{(100 - 4)}{100} \times 1540 \right\} = \frac{96}{100} \times 1540 = \frac{147840}{100} = \text{Rs. } 1478.40$$

*iv* CP = Rs. 8640

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

$$SP = \left\{ \frac{(100 - \text{Loss } \%)}{100} \times CP \right\} = \left\{ \frac{\left(100 - \frac{25}{2}\right)}{100} \times 8640 \right\} = \frac{175}{200} \times 8640 = \frac{1512000}{200} = \text{Rs. } 7560$$

**Question:2**

Find the gain or loss per cent when:

*i* CP = Rs 2400 and SP = Rs 2592

*ii* CP = Rs 1650 and SP = Rs 1452

*iii* CP = Rs 12000 and SP = Rs 12800

*iv* CP = Rs 1800 and SP = Rs 1611

**Solution:**

*i* CP = Rs. 2400

SP = Rs. 2592

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

$$\text{Gain\%} = \left( \frac{\text{Gain}}{\text{CP}} \times 100 \right) = \left( \frac{192}{2400} \times 100 \right) = 8$$

*ii* CP = Rs. 1650

SP = Rs. 1452

$$\text{Loss} = \text{CP} - \text{SP} = 1650 - 1452 = \text{Rs. } 198$$

$$\text{Loss\%} = \left( \frac{\text{Loss}}{\text{CP}} \times 100 \right) = \left( \frac{198}{1650} \times 100 \right) = 12$$

*iii* CP = Rs. 12000 and SP = Rs. 12800

$$\text{Gain} = \text{SP} - \text{CP} = 12800 - 12000 = \text{Rs. } 800$$

$$\text{Gain\%} = \left( \frac{\text{Gain}}{\text{CP}} \times 100 \right) = \left( \frac{800}{12000} \times 100 \right) = 6.66$$

*iv* CP = Rs. 1800

SP = Rs. 1611

$$\text{Loss} = \text{CP} - \text{SP} = 1800 - 1611 = \text{Rs. } 189$$

$$\text{Loss\%} = \left( \frac{\text{Loss}}{\text{CP}} \times 100 \right) = \left( \frac{189}{1800} \times 100 \right) = 10.5$$

### Question:3

Find the CP when:

*i* SP = Rs 924, gain = 10%

*ii* SP = Rs 1755, gain =  $12\frac{1}{2}\%$

*iii* SP = Rs 8510, loss = 8%

*iv* SP = Rs 5600, loss =  $6\frac{2}{3}\%$

### Solution:

*i* SP = Rs. 924

Gain = 10%

$$\begin{aligned} \text{CP} &= \left\{ \frac{100}{(100 + \text{Gain \%})} \times \text{SP} \right\} \\ &= \left\{ \frac{100}{(100 + 10)} \times 924 \right\} = \frac{92400}{110} = \text{Rs. } 840 \end{aligned}$$

*ii* SP = Rs. 1755

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

$$\text{CP} = \left\{ \frac{100}{(100 + \text{Gain \%})} \times \text{SP} \right\} = \left\{ \frac{100}{\left(100 + \frac{25}{2}\right)} \times 1755 \right\} = \left\{ \frac{200}{225} \times 1755 \right\} = \frac{351000}{225} = \text{Rs. } 1560$$

*iii* SP = Rs. 8510

Loss = 8%

$$CP = \left\{ \frac{100}{(100 - \text{Loss \%})} \times SP \right\} = \left\{ \frac{100}{(100 - 8)} \times 8510 \right\} = \frac{851000}{92} = \text{Rs. } 9250$$

iv SP = Rs. 5600

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

$$CP = \left\{ \frac{100}{(100 - \text{Loss \%})} \times SP \right\} = \left\{ \frac{100}{\left(100 - \frac{20}{3}\right)} \times 5600 \right\} = \left\{ \frac{300}{280} \times 5600 \right\} = \frac{168000}{28} = \text{Rs. } 6000$$

#### Question:4

Sudhir bought an almirah for Rs 13600 and spent Rs 400 on its transportation. He sold it for Rs 16800. Find his gain per cent.

#### Solution:

Cost price of an almirah = Rs. 13600

Transportation cost = Rs. 400

Total cost price = Rs. 13600 + 400 = Rs. 14000

Selling price = Rs. 16800

Now, SP > CP

Gain = SP - CP = 16800 - 14000 = Rs. 2800

$$\text{Gain \%} = \left( \frac{\text{Gain}}{\text{CP}} \times 100 \right) \%$$

$$= \left( \frac{2800}{14000} \times 100 \right) \%$$

$$= \frac{2800}{140} \% = 20\%$$

#### Question:5

Ravi purchased an old house for Rs 765000 and spent Rs 115000 on its repairs. Then, he sold it at a gain of 5%. How much did he get?

#### Solution:

Cost price of the house = Rs. 765000

Cost of repairing the house = Rs. 115000

Total Cost price = 765000 + 115000 = Rs. 880000

Ravi sold it at a gain of 5%.

$$SP = \left\{ \frac{(100 + \text{gain \%})}{100} \times CP \right\} = \left\{ \frac{(100 + 5)}{100} \times 880000 \right\} = \frac{105}{100} \times 880000 = \text{Rs. } 924000$$

He gets Rs. 924000.

#### Question:6

A vendor buys lemons at Rs 25 per dozen and sells them at the rate of 5 for Rs 12. Find his gain or loss per cent.

#### Solution:

CP of 12 lemons *dozen* = Rs. 25

CP of one lemon = Rs.  $\frac{25}{12}$

CP of five lemons =  $5 \times \frac{25}{12} = \frac{125}{12} = \text{Rs. } 10.42$

SP of five lemons = Rs. 12      *given*

Gain = SP - CP =  $12 - 10.42 = \text{Rs } 1.58$

Gain% =  $\left( \frac{\text{Gain}}{\text{CP}} \times 100 \right) \%$

=  $\left( \frac{1.58}{10.42} \times 100 \right) \%$

= 15.2%

#### **Question:7**

The selling price of 12 pens is equal to the cost price of 15 pens. Find the gain per cent.

#### **Solution:**

Let the cost price of the pen be Re 1.

Cost price of 12 pens = Rs 12

SP of 12 pens = CP of 15 pens = Rs 15

Gain = SP - CP =  $\text{Rs } 15 - 12 = \text{Rs } 3$

Gain% =  $\left( \frac{\text{Gain}}{\text{CP}} \times 100 \right) \%$

=  $\left( \frac{3}{12} \times 100 \right) \% = 25\%$

Gain% = 25%

#### **Question:8**

The selling price of 16 spoons is equal to the cost price of 15 spoons. Find the loss per cent.

#### **Solution:**

Let the cost price of one spoon be Re 1.

CP of 16 spoons = Rs 16

SP of 16 spoons = CP of 15 spoons = Rs 15

Loss = CP - SP =  $16 - 15 = \text{Re } 1$

Loss% =  $\left( \frac{\text{Loss}}{\text{CP}} \times 100 \right) \% = \left( \frac{1}{16} \times 100 \right) \% = 6.25\%$

Loss% = 6.25%

#### **Question:9**

Manoj purchased a video for Rs 12000. He sold it to Rahul at a gain of 10%. If Rahul sells it to Rakesh at a loss of 5%, what did Rakesh pay for it?

#### **Solution:**

Cost price of a video = Rs. 12000

$$\text{SP of a video at a gain of 10\%} = \left\{ \frac{(100 + \text{Gain \%})}{100} \times \text{CP} \right\}$$

$$= \left\{ \frac{(100 + 10)}{100} \times 12000 \right\} = \left\{ \frac{110}{100} \times 12000 \right\} = \text{Rs. } 13200$$

So, Rahul purchased at a cost price of Rs. 13200.

Rahul sells it at a loss of 5%.

$$\text{SP of a video at loss of 5\%} = \left\{ \frac{(100 - \text{Loss \%})}{100} \times \text{CP} \right\}$$

$$= \left\{ \frac{(100 - 5)}{100} \times 13200 \right\} = \frac{95}{100} \times 13200 = \text{Rs. } 12540$$

∴ Rakesh pays = Rs. 12540

#### Question:10

On selling a sofa-set for Rs 21600, a dealer gains 8%. For how much did he purchase it?

**Solution:**

SP of the sofa set = Rs. 21600

Gain% = 8

$$\text{CP of the sofa set} = \left\{ \frac{100}{(100 + \text{Gain\%})} \times \text{SP} \right\} = \left\{ \frac{100}{(100 + 8)} \times 21600 \right\} = \frac{2160000}{108} = \text{Rs. } 20000$$

He purchased it at the cost of Rs. 20000.

#### Question:11

On selling a watch for Rs 11400, a shopkeeper loss 5%. For how much did the purchase it?

**Solution:**

SP of the watch = Rs 11400

Loss% = 5

$$\text{CP} = \left\{ \frac{100}{(100 - \text{Loss \%})} \times \text{SP} \right\}$$

$$= \left\{ \frac{100}{(100 - 5)} \times 11400 \right\} = \frac{11400}{95} = \text{Rs. } 12000$$

He purchased it at the cost of Rs. 12000.

#### Question:12

On selling a calculator for Rs 1325, a man gains 6%. For how much should he sell it to gain 12%?

**Solution:**

SP of the calculator = Rs. 1325

Gain % = 6

$$\text{CP of the calculator} = \left\{ \frac{100}{(100 + \text{Gain \%})} \times \text{SP} \right\}$$

$$= \left\{ \frac{100}{(100 + 6)} \times 1325 \right\} = \frac{132500}{106} = \text{Rs. } 1250$$

$$\text{SP of the calculator} = \left\{ \frac{(100 + \text{Gain \%})}{100} \times \text{CP} \right\} = \left\{ \frac{(100 + 12)}{100} \times 1250 \right\} = \frac{140000}{100} = \text{Rs. } 1400$$

### Question:13

On selling a computer for Rs 24480, a dealer loses 4%. For how much should he sell it to gain 4%?

**Solution:**

SP of a computer = Rs. 24480

Loss% = 4

$$\text{CP of the computer} = \left\{ \frac{100}{(100 - \text{Loss \%})} \times \text{SP} \right\} = \left\{ \frac{100}{(100 - 4)} \times 24480 \right\} = \frac{2448000}{96} = \text{Rs. } 25500$$

In order to gain 4%:

$$\text{SP of the computer} = \left\{ \frac{(100 + \text{Gain \%})}{100} \times \text{CP} \right\} = \left\{ \frac{(100 + 4)}{100} \times 25500 \right\} = \left\{ \frac{104}{100} \times 25500 \right\} = \frac{2652000}{100} = \text{Rs. } 26520$$

### Question:14

A tricycle is sold at a gain of 15%. Had it been sold for Rs 108 more, the profit would have been 20%. Find its cost price.

**Solution:**

Let the CP of the tricycle be Rs.  $x$

$$\begin{aligned} \text{SP at 15\% gain} &= \left\{ \frac{(100 + \text{Gain \%})}{100} \times \text{CP} \right\} \\ &= \left\{ \frac{(100 + 15)}{100} \times x \right\} = \frac{115}{100} x \end{aligned}$$

$$= \text{Rs. } \frac{23}{20} x$$

$$\text{SP at 20\% gain} = x \times \frac{120}{100} = \text{Rs. } \frac{6}{5} x$$

$$\frac{6}{5} x - \frac{23}{20} x = 108 \Rightarrow \frac{24x - 23x}{20} = 108 \Rightarrow \frac{x}{20} = 108 \Rightarrow x = 2160$$

Hence, the cost price of the tricycle is Rs. 2160

### Question:15

Sandeep sold a television at a loss of 8%. If he had sold it for Rs 3360 more, he would have gained 6%. For how much did Sandeep buy it?

**Solution:**

Let CP of a television be Rs  $x$ .

$$\text{SP at 8\% loss} = \frac{(100-8)}{100} \times x = \text{Rs. } \frac{92}{100} x$$

$$\text{SP at 6\% gain} = \left( \frac{100+6}{100} \right) \times x = \text{Rs. } \frac{106}{100} x$$

$$\frac{106}{100} x - \frac{92}{100} x = 3360$$

$$\Rightarrow \frac{14}{100} x = 3360$$

$$\Rightarrow x = \frac{336000}{14} = 24000$$

$\therefore$  CP = Rs. 24000

Sandeep bought it at the cost of Rs. 24000.

### Question:16

Pankaj sells two cycles for Rs 2376 each. On one he gains 10% and on the other he loss 10%. Find his gain or loss per cent.

**Solution:**

SP of each cycle = Rs. 2376

He gains 10% in one cycle.

$$\begin{aligned} \text{CP} &= \left\{ \frac{100}{(100 + \text{Gain \%})} \times \text{SP} \right\} \\ &= \left\{ \frac{100}{(100 + 10)} \times 2376 \right\} = \frac{100}{110} \times 2376 = \text{Rs. } 2160 \end{aligned}$$

He loses 10% in the second cycle.

$$\begin{aligned} \text{CP} &= \frac{100}{(100 - \text{Loss \%})} \times \text{SP} \\ &= \frac{100}{(100 - 10)} \times 2376 = \frac{100}{90} \times 2376 = \frac{23760}{9} = \text{Rs. } 2640 \end{aligned}$$

Total CP = Rs. ( 2160 + 2640 ) = Rs. 4800

Total SP = Rs. ( 2376 + 2376 ) = Rs. 4752

Loss = CP - SP = Rs. ( 4800 - 4752 ) = Rs. 48

$$\begin{aligned} \text{Loss \%} &= \left( \frac{\text{Loss}}{\text{CP}} \times 100 \right) \% \\ &= \left( \frac{48}{4800} \times 100 \right) \% = 1\% \end{aligned}$$

### Question:17

On selling an exhaust fan for Rs 7350, a man gains  $\frac{1}{6}$  of its cost price. Find the cost price of the fan.

**Solution:**

Let the CP of the exhaust fan be Rs.  $x$ .

$$\text{Gain} = \text{Rs. } \frac{x}{6}$$

$$\text{SP} = \text{Rs} \left( x + \frac{x}{6} \right)$$

SP = Rs. 7350

$$\therefore x + \frac{x}{6} = 7350$$

$$\Rightarrow \frac{7}{6}x = 7350$$

$$\Rightarrow x = \frac{7350 \times 6}{7} = \frac{44100}{7} = 6300$$

CP of the fan = Rs. 6300

### Question:18

Mohit sold a watch to Karim at a gain of 10% and Karim sold it to Rahim at a gain of 4%. If Rahim pays Rs 14300 for it, for how much did Mohit purchase it?

#### Solution:

Mohit sold a watch to Karim at Rs.  $x$ .

Mohit sold it at a gain of 10%.

SP of the watch = 110% of  $x$

$$= \left( x + \frac{110}{100} \right) = \text{Rs. } \frac{11}{10}x$$

Karim sold it to Rahim at a gain of 4%.

$$\text{SP of the watch} = 104\% \text{ of } \frac{11}{10}x = \left( \frac{104}{100} \times \frac{11}{10}x \right) = \text{Rs. } \left( \frac{26}{25} \times \frac{11}{10}x \right)$$

But, Rahim pays Rs. 14300.

$$\therefore \frac{26}{25} \times \frac{11}{10}x = 14300$$

$$\Rightarrow x = \frac{14300 \times 25 \times 10}{26 \times 11} = \frac{3575000}{286} = 12500$$

Mohit purchased it at Rs. 25000.

### Question:19

If the manufacturer gains 10%, the wholesale dealer 15%, and the retailer 25% then what is the production cost of a washing machine whose retail price is Rs 37950?

#### Solution:

Let the production cost of a washing machine be Rs.  $x$ .

Profit of the manufacturer = 10%

SP of the manufacturer = 110% of  $x$

$$= \left( x + \frac{110}{100} \right) = \frac{110}{100}x = \text{Rs. } \frac{11}{10}x$$

Profit of the wholesale dealer = 15%

SP of the wholesale dealer = 115% of Rs.  $\frac{11}{10}x$

$$= \text{Rs. } \left( \frac{11}{10}x \times \frac{115}{100} \right) = \text{Rs. } \left( \frac{11}{10}x \times \frac{23}{20} \right)$$

Profit of the retailer = 25%

SP of the retailer = 125% of Rs.  $\left( \frac{11}{10}x \times \frac{23}{20} \right)$

$$= \text{Rs. } \left( \frac{11}{10}x \times \frac{23}{20} \times \frac{125}{100} \right) = \text{Rs. } \left( \frac{11}{10}x \times \frac{23}{20} \times \frac{5}{4} \right)$$

Given:

Retail price = Rs. 37950

$\therefore$

$\Rightarrow x =$



∴ Production cost of a washing machine = Rs. 24000

**Question:20**

Mr Mehta purchased a video for Rs 20000 and a television for Rs 30000. On the video he lost 5% and on the television he gained 8%. Find his total gain or loss per cent.

**Solution:**

Mr. Mehta purchased a video at the cost of Rs. 20000.

Mr. Mehta purchased a television at the cost of Rs. 30000.

Total cost = Rs. 20000 + 30000 = Rs. 50000

He lost 5% on the video.

He gained 8% on the television.

Total SP =

Total CP = Rs. 50000

Total Gain = SP - CP =

**Question:21**

By selling 36 oranges, a vendor suffers a loss equal to the selling price of 4 oranges. Find his loss per cent.

**Solution:**

Let the CP of 1 orange be Rs.  $x$ .

∴ CP of 36 oranges = Rs.  $36x$

Let SP of orange be Rs.  $y$ .

∴ SP of 36 oranges = Rs.  $36y$

Loss = SP of 4 oranges = given

We know:

Loss = CP - SP

⇒

⇒

⇒

⇒

⇒

%

%

$$\text{Loss\%} = 10\%$$

**Question:22**

By selling 8 dozen pencils, a shopkeeper gains the selling price of one dozen pencils. Find his gain per cent.

**Solution:**

Let the CP of one pencil be Rs.  $x$ .

Therefore, the CP of 96 pencils will be Rs.  $96x$ .

Let SP of one pencil be Rs.  $y$ .

$\therefore$  SP of 96 pencils = Rs.  $96y$

Gain = SP of one dozen pencil = Rs.  $12y$       given

$$\text{Gain} = \text{SP} - \text{CP}$$

**Question:23**

**Mark ✓ against the correct answer**

A man buys a book for Rs 80 and sells it for Rs 100. His gain % is

- a 20%
- b 25%
- c 120%
- d 125%

**Solution:**

- b 25%

CP of the book = Rs. 80

SP of the book = Rs. 100

Gain = SP - CP = Rs.  $100 - 80 = \text{Rs. } 20$

**Question:24**

**Mark ✓ against the correct answer**

A football is bought for Rs 120 and sold for Rs 105. The loss % is

- a
- b
- c
- d

**Solution:**

- a

CP of a football = Rs. 120

SP of a football = Rs. 105

CP > SP

$\therefore \text{Loss} = \text{CP} - \text{SP} = \text{Rs. } 120 - 105 = \text{Rs. } 15$

**Question:25**

**Mark ✓ against the correct answer**

On selling a bat for Rs 100, a man gains Rs 20. His gain % is

- a 20%
- b 25%
- c 18%
- d 22%

**Solution:**

b 25%

SP of the bat = Rs. 100

Gain = Rs. 20

Gain = SP - CP

$$\Rightarrow 20 = 100 - \text{CP}$$

$$\Rightarrow \text{CP} = 100 - 20 = \text{Rs. } 80$$

**Question:26**

**Mark ✓ against the correct answer**

On selling a racket for Rs 198, a shopkeeper gains 10%. The cost price of the racket is

- a Rs 180
- b Rs 178.20
- c Rs 217.80
- d Rs 212.50

**Solution:**

a Rs. 180

SP of the racket = Rs. 198

Gain% = 10

**Question:27**

**Mark ✓ against the correct answer**

On selling a jug for Rs 144, a man loses of his outlay. If it is sold for Rs 189, what is the gain%?

- a 50%
- b 25%
- c 30%
- d 12%

**Solution:**

Let the cost price be Rs.  $x$ .

Loss =

$\therefore$  SP =

Given:

SP = Rs. 144

$\therefore$

$\Rightarrow$

$\therefore$  CP = Rs. 168

SP = Rs. 144

New SP = Rs. 189

Gain = SP - CP =

The correct answer is 12.5%.

All the given options are wrong.

**Question:28**

**Mark ✓ against the correct answer**

On selling a pen for Rs 48, a shopkeeper loses 20%. In order to gain 20% what would be the selling price?

a Rs 52

b Rs 56

c Rs 68

d Rs 72

**Solution:**

d Rs. 72

SP of the pen = Rs. 48

Loses = 20%

Then ,

In order to gain 20%:

**Question:29**

**Mark ✓ against the correct answer**

If the cost price of 12 pencils is equal to the selling price of 15 pencils, then the loss% is

a 20%

b 25%

c 3%

d

**Solution:**

a 20%

Let the cost price of each pencil be Rs.1

Cost of 15 pencils = Rs 15

SP of 15 pencil = CP of 12 pencil = Rs 12

$\therefore$  CP = Rs 15

SP = Rs 12

Loss = CP - SP =

**Question:30**

**Mark ✓ against the correct answer**

If the cost price of 4 toffees be equal to the selling price of 3 toffees, then the gain% is

a 25%

b 30%

c

d

**Solution:**

d

Let the cost price of each toffee be Rs. 1

Cost price of three toffees = Rs 3

SP of three toffees = CP of four toffees = Rs 4

CP = Rs 3

SP = Rs 4

Gain = SP - CP =

**Question:31**

**Mark ✓ against the correct answer**

On selling an article for Rs 144 a man loses 10%. At what price should he sell it to gain 10%?

a Rs 158.40

b Rs 172.80

c Rs 176

d Rs 192

**Solution:**

c Rs. 176

SP of an article = Rs. 144

Loss% = 10

In order to gain 10%:

**Question:32**

**Mark ✓ against the correct answer**

A vendor bought lemons at 6 for a rupee and sold them at 4 for a rupee. His gain % is

- a 50%
- b 40%
- c
- d

**Solution:**

- a 50%

CP of six lemons = Re 1

CP of one lemon =

CP of four lemon =

SP of four lemon = Re 1

Gain =

**Question:33**

**Mark ✓ against the correct answer**

On selling a chair for Rs 720, a man gains 20%. The cost price of the chair is

- a Rs 864
- b Rs 576
- c Rs 650
- d Rs 600

**Solution:**

- dRs. 600

SP of the chair = Rs 720

Gain% = 20

**Question:34**

**Mark ✓ against the correct answer**

On selling a stool for Rs 630, a man loses 10%. The cost price of the stool is

- a Rs 567
- b Rs 693

c Rs 700

d Rs 730

**Solution:**

c Rs. 700

SP of a stool = Rs 630

Loss% = 10

**Question:35**

By selling a chair for Rs 1375 a man gains 10%. Find its cost price.

**Solution:**

SP of the chair = Rs 1375

Gain% = 10

**Question:36**

If the selling price of 10 pens is equal to the cost price of 14 pens, find gain per cent.

**Solution:**

Let the cost of each pen be Rs. 1

CP of 10 pens = Rs. 10

SP of 10 pens = CP of 14 pens = Rs. 14

Gain = SP - CP = 14-10= Rs. 4

**Question:37**

On selling a fan for Rs 2585 a man gains of its cost price. Find the cost price of the fan.

**Solution:**

Let the cost price of the fan be Rs. x.

Gain =

SP of the fan =

SP of the fan =

∴

⇒

⇒

So, CP of the fan is Rs. 2350.

**Question:38**

A man buys lemons at 6 for Rs 10 and sells at 8 for Rs 15. Find his gain per cent.

**Solution:**

Cost price of six lemons = Rs. 10

Cost price of one lemon =

Cost price of eight lemons =

Selling price of eight lemons = Rs. 15

Gain% = %

%

%

**Question:39**

On selling a bat for Rs 486 a man loses 10%. Find the cost price of the bat.

**Solution:**

SP of the bat = Rs 486

Loss = 10%

CP of the bat =

CP of the bat = Rs 540

**Question:40**

**Mark ✓ against the correct answer**

On selling a football for Rs 100, a man gains Rs 15. The cost price of the football is

a Rs 115

b Rs 85

c Rs 70

d Rs 130

**Solution:**

b Rs 85

SP of a football = Rs 100

Gain = Rs 15

Gain = SP - CP

$$\Rightarrow 15 = 100 - \text{CP}$$

$$\Rightarrow \text{CP} = \text{Rs } 100 - 15$$

$$\Rightarrow \text{CP} = \text{Rs } 85$$

**Question:41**

**Mark ✓ against the correct answer**

A vendor buys lemons at Rs 25 per dozen and sells at 5 for Rs 12. His gain per cent is

a 14.5%

b 15%

c 15.2%

d 16%

**Solution:**



c 15.2%

Cost price of 12 bananas = Rs. 25

Cost price of one banana =

He sells five bananas at the cost SP of Rs. 12.

Gain = SP - CP

=

#### Question:42

**Mark ✓ against the correct answer**

On selling a jug for Rs 168, a man loses of his outlay. The cost price of the jug is

- a Rs 144
- b Rs 192
- c Rs 196
- d none of these

**Solution:**

c Rs. 196

Let the cost price of the jug be Rs. x.

Loss =

SP of the jug = CP - Loss

SP of the jug = given

∴

∴ CP of the jug =

#### Question:43

**Mark ✓ against the correct answer**

If the cost price of 5 bananas be equal to the selling price of 3 bananas, then gain per cent is

- a
- b 15%
- c
- d 40%

**Solution:**

c

Let the cost price of each banana be Re 1.

Cost price of three bananas = Rs. 3

SP of three bananas = CP of five bananas = Rs. 5

Gain = SP - CP =

**Question:44**

**Fill in the blanks.**

i Loss = CP - .....

ii CP = .

iii Profit or loss is always reckoned on ..... .

iv

**Solution:**

i Loss = CP - (SP)

ii CP =

iii Profit or loss is always reckoned on the cost price.

iv = CP

**Question:45**

**Write 'T' for true and 'F' for false**

i Loss is reckoned on selling price.

ii Gain is reckoned on cost price.

iii

iv Loss = CP – SP.

**Solution:**

i False

Gain or loss is always reckoned on the cost price.

ii True

iii True

iv True