### Q9

### Answer:

Cost price of a video = Rs. 12000

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

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

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

Rahul sells it at a loss of 5%.

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

### Q10

#### Answer:

SP of the sofa set = Rs. 21600 Gain% = 8

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

$$= \left\{ \frac{100}{(100 + 8)} \times 21600 \right\}$$

$$= \frac{2160000}{108}$$
= Rs. 20000

He purchased it at the cost of Rs. 20000.

### Q11

### Answer:

SP of the watch = Rs 11400 Loss% = 5

$$ext{CP} \ = \ \left\{ rac{100}{\left(100 - ext{Loss \%}
ight)} imes ext{SP} 
ight\}$$

$$= \left\{ \frac{100}{(100-5)} \times 11400 \right\}$$

$$= \frac{11400}{95}$$

$$= Rs. 12000$$

He purchased it at the cost of Rs. 12000.

# Q12

### Answer:

SP of the calculator = Rs. 1325 Gain % = 6

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

=  $\left\{ \frac{100}{(100 + 6)} \times 1325 \right\}$ 

=  $\frac{132500}{106}$ 

= Rs. 1250

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

=  $\left\{ \frac{(100 + 12)}{100} \times 1250 \right\}$ 

=  $\frac{140000}{100}$ 

= Rs. 1400

### Q13

### Answer:

SP of a computer = Rs. 24480 Loss% = 4

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

In order to gain 4%:

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

## Q14

### Answer:

Let the CP of the tricycle be Rs. x

SP at 15% gain = 
$$\left\{ \frac{(100 + G \sin \%)}{100} \times \text{ CP} \right\}$$
  
=  $\left\{ \frac{(100 + 15)}{100} \times x \right\}$   
=  $\frac{115}{100} x$   
=  $\text{Rs.} \ \frac{23}{20} x$   
SP at 20% gain =  $x \times \frac{120}{100} = \text{Rs.} \ \frac{6}{5} x$