

$$\Rightarrow 1350 = \frac{100x - 25x}{100}$$

$$\Rightarrow 135000 = 75x \Rightarrow x = \frac{13500}{75} \Rightarrow x = 1800$$

Therefore, the marked price of the fan is Rs 1800.

Q9.

### Answer:

Cost price of the refrigerator = Rs 11515 Gain percentage = 20%.

∴ Selling price = 
$$\left\{ \frac{(100 + \text{gain \%})}{100} \times C.P \right\}$$
  
=  $\left\{ \frac{100 + 20}{100} \times 11515 \right\}$   
=  $\frac{120}{100} \times 11515$   
= Rs 13818

Let the marked price be Rs z.

Discount = 16% of 
$$Rs \ x$$
  
=  $\frac{16x}{100}$   
S.P = MP - Discount  
⇒ 13818 =  $x - \frac{16x}{100}$   
⇒ 13818 =  $\frac{100x - 16x}{100}$   
⇒ 1381800 = 84 $x$  ⇒  $x = \frac{1381800}{84}$  ⇒  $x = 16450$ 

Therefore, the marked price of the refrigerator is Rs 16450.

Q10.

### Answer:

The cost price of the ring is Rs 1190.

Gain percentage = 20%.

∴ Selling price = 
$$\left\{ \frac{(100 + gain \%)}{100} \times C.P \right\}$$
  
=  $\left\{ \frac{100 + 20}{100} \times 1190 \right\}$   
=  $\frac{120}{100} \times 1190$   
= Rs 1428

Let the marked price be z.

Discount = 16% of 
$$Rs x$$
  
=  $\frac{16x}{100}$   
SP = MP - Discount  
 $\Rightarrow 1428 = x - \frac{16x}{100}$   
 $\Rightarrow 1428 = \frac{100x - 16x}{100}$ 

$$\Rightarrow 142800 = 84x$$

$$\Rightarrow \frac{142800}{84} = x$$

$$\Rightarrow x = 1700$$

Therefore, the marked price of the ring is Rs 1700.

# Q11.

### Answer:

Let Rs 100 be the cost price.

Gain required = 17%

:. Selling price = Rs 117

Let the marked price be Rs x.

$$= \frac{10}{100} \times \boldsymbol{x}$$
$$= \frac{\boldsymbol{x}}{10}$$

Selling Price = MP - discount

$$\Rightarrow 117 = x - \frac{x}{10}$$

$$\Rightarrow 117 = \frac{9x}{10}$$

$$\Rightarrow 9x = 1170$$

$$\Rightarrow x = \frac{1170}{9}$$

$$\Rightarrow x = 130$$

.. Marked price = Rs 130

Hence, the marked price is 30% above the cost price.

# Q12.

## Answer:

Let Rs 100 be the cost price.

Gain required = 8%

Therefore, the selling price is  $\emph{Rs}$  108.

Let  $\mathbf{Rs} \ \mathbf{x}$  be the marked price.

Then, discount = 10% of x

$$= \frac{10}{100} \times \boldsymbol{x}$$
$$= \frac{\boldsymbol{x}}{10}$$

Selling Price = MP - discount

$$\Rightarrow 117 = x - \frac{x}{10}$$

$$\Rightarrow 117 = \frac{9x}{10}$$

$$\Rightarrow 9x = 1080$$

$$\Rightarrow x = \frac{1080}{9}$$

$$\Rightarrow x = 120$$

:. Marked price = Rs 120

Hence, the marked price is 20% above the cost price.

# Q13.

## Answer:

Marked price of the TV = Rs 18500 First discount = 20%

Now, 20% of 18500  
= 
$$\frac{20}{100} \times 18500$$
  
= Rs 3700

#### Q14.

#### Answer:

Let the marked price of the article be Rs 100. First discount = 20% Price after the first discount = (100 - 20) = Rs 80 Second discount = 5% of 80 =  $\frac{5}{100} \times 80$  = Rs 4

=  $\mathbf{Rs}\ 4$ Price after the second discount = (80 - 4) =  $\mathbf{Rs}\ 76$ Net selling price =  $\mathbf{Rs}\ 76$ 

∴ Single discount equivalent to the given successive discounts = (100 - 76)% = 24%

\*\*\*\*\*\*\*\*\* FND \*\*\*\*\*\*\*