Answer on Question#39862 –Economics - Finance

Question.

A dealer of electronic goods allows 12% discount and still makes a profit of 10%. If he gains Rs

120 on the sales of goods, find the marked price.

Solution.

Let x is the market price and cost price is c, then:

$$(1-0.12) \cdot x = (1+0.10) \cdot c \Leftrightarrow 0.88 \cdot x = 1.10 \cdot c \Rightarrow x = \frac{1.10}{0.88} \cdot c = 1.25 \cdot c.$$

At the same moment we know that a dealer gains Rs. 120 and it's a 10% from the cost

price:

$$0.1 \cdot c = 120 \Rightarrow c = \frac{120}{0.1} = 1200.$$

So, the cost price is Rs. 1200. Then market price is:

$$x = 1.25 \cdot 1200 = 1500.$$

We received that the market price is Rs. 1500.

Answer: The market price is Rs. 1500.