

Question #43301, Math, Algebra

A wholesaler allows a discount of 20% on the list price to retailer. The retailer sells at 5% discount on the list price. If a customer paid Rs38 for an article, what profit is made by the retailer? Find also the retailers percentage profit on his cost, giving your answer correct two decimal places.

Answer.

Let x be a list price.

So, the price to retailer is $x * (1 - 0.2) = 0.8x$.

And the retailer sells for $x * (1 - 0.05) = 0.95x$.

If a customer paid Rs38, then $0.95x = 38 \rightarrow x = \frac{38}{0.95} = Rs40$.

The price to retailer: $0.8 * 40 = Rs32$.

The profit made by the retailer: $38 - 32 = Rs6$.

The retailer's percentage profit on his cost: $\frac{6}{32} * 100\% = 18.75\%$.