

Answer on Question # 42944, Math, Other

A man buys two cycles for a total cost of RS 900. by selling one cycle at a loss of 20% and other at a profit of 25%, he makes a profit of rs 90 on the whole .find the c.p of each cycle

Solution:

Let the price of the first cycle is x . The price of the second is y . A total cost is 900, so

$$x + y = 900$$

First cycle was selling at a loss of 20%:

$$x - 0.2x = 0.8x$$

The second cycle was selling at a profit of 25%:

$$y + 0.25y = 1.25y$$

The profit of RS is 90. So,

$$0.8x + 1.25y = 900 + 90$$

Now we can find the x :

$$0.8x + 1.25(900 - x) = 990$$

$$0.8x + 1125 - 1.25x = 990$$

$$0.45x = 135$$

$$x = \mathbf{300}$$

So,

$$y = 900 - x$$

$$y = 900 - 300 = \mathbf{600}$$

Answer:

300 and 600.