Answer on Question #61588 - Math - Financial Math

Question

The value of a machine depreciation every year by 20% if the present value of the machine be Rs160000 what was its value last year.

Solution

The value of machine last year is x.

Depreciates percentage is 20%.

So, the present value =

= Value of last year - Depreciate amount =

$$= x - x \cdot \frac{20}{100} = x - \frac{x}{5} = \frac{5x - x}{5} = \frac{4x}{5}.$$

And the given present value = RS.160000.

So

$$\frac{4x}{5} = 160000 \Longrightarrow$$

$$x = \frac{160000 \cdot 5}{4} = 40000 \cdot 5 = 200000.$$

So, the value of machine last year is equal to Rs 200000.

Answer: Rs 200000.