

Question 1: Use double integral in rectangular co-ordinates to compute area of the region bounded by the curves x and $y = x^2$, in the first quadrant.

Question 2: After a markup of 30% on sales a watch sells for Rs. 225. What is its cost price?

Question 3: After marketing analysis, calculate the break even point in rupees provided that fixed cost = Rs.500, contribution margin = Rs.250 & expected sale rate is 1000 per item.

Question 4: After spending 30 minutes in exercise a man loses about 4% of his body weight. If his weight before exercise is 70 kg what will be his weight now?

Question 5: A gold chain is sold for Rs. 6500 at a gain of 25%. Find the profit.

Answer:

Selling price = 6500

Profit = 25%

Profit in Rs = $(6500 \times 25) / 100 = \text{Rs } 1625$

Question 6: A man borrows \$39000 for 1 and half year at a rate of 1.65%. What is the simple interest he has to pay?

Answer:

Simple interest is given by

$I = P \times R \times T / 100$

P = principal = \$39000

R = interest rate = 1.65%

T = 1.5 year

Interest, $I = (39000 \times 1.65 \times 1.5) / 100 = \text{Rs } 965.25$