Question

A restaurant offers a new promotion of 20% off the original price of cheese pizzas, which is $12. Before the promotion 250 pizzas were sold each day. After the promotion, the sale of pizza increases an average of 18% more per day.

How much more or less does the restaurant make each day in pizza sales after the promotion?

Solution

If in case of new promotion of 20% off the original price of cheese pizzas, which is $12, the sale of pizza increases an average of 18% more per day from 250 pizzas, then the total change in pizza sales (total revenue, TR) per day after the promotion is

\[ \text{Change in TR} = P_2 \times Q_2 - P_1 \times Q_1 = 12 \times 0.8 \times 250 \times 1.18 - 12 \times 250 = -$168. \]

So, the restaurant makes $168 less each day in pizza sales after the promotion.

Answer: $168 less.