ACTIVITY 3: Reviving Revenue!

The same analyst determined that a company's demand, where p denotes the unit price and x denotes the quantity demanded, is given by the demand function p = -0.02 x + 300.

1. Find the total revenue function R(x) by substituting p into R(x) = p·x.

2. Find the marginal revenue function.

3. Compute the marginal revenue for the 4001st and 8001st item produced.

4. Compare your marginal cost and marginal revenue for the 4001st item produced. Interpret your result.

5. Compare your marginal cost and marginal revenue for the 8001st item produced. Interpret your result.

6. How can we use our findings to guide this company's production?