Vocabulary/Definitions

- Fixed costs
- Economy of scale
- Revenue
- Profit, as a function of revenue and cost
- Marginal cost and marginal revenue, as average rates of change
- Marginal cost and marginal revenue, as derivatives
- Why maximum profit occurs when $MR = MC$

Understand

1. If the revenue of a business, $R$ as a function of the quantity of items produced, $q$, is $R(q) = 7.31q$, what is the marginal revenue?

2. Suppose that the cost and revenue functions for a business are $C(q) = 2.5q^3 + 2$ and $R(q) = 15q$. At what value of $q$, the quantity of items produced, is the profit maximized?