1. (5 pts) Find the second derivative of \( h(x) = \sqrt[3]{x^3} + 8 \).

2. (5 pts) A company has a price-demand equation of \( p = \frac{-1}{15} x + 500 \) and a cost function of \( C(x) = 150,000 + 30x \), where \( x \) is the number of items that can be sold at a price of \( p \) dollars per item and \( C(x) \) is the total cost (in dollars) of producing \( x \) items.

Find the marginal profit function and evaluate it when 6000 items are produced and sold, and interpret your answer. Make sure to include appropriate units.