b. Suppose that Glenside Bolt can sell up to 40 units of output per hour at a price of $.60 per unit but cannot even get a penny for units produced in excess of 40 units per hour. How much output should Glenside Bolt produce each hour in order to maximize profits?

c. At what price would Glenside Bolt find it profitable to shut down its operation?

6. You are the manager of a monopoly, and your demand and cost functions are given by \( P = 480 - 8Q \) and \( C(Q) = 500 + 4Q^2 \), respectively.

a. What price-quantity combination maximizes your firm’s profits

b. Calculate the maximum profits.

c. Is demand elastic, inelastic, or unit elastic at the profit-maximizing price-quantity combination?

d. What price-quantity combination maximizes revenue?

e. Calculate the maximum revenues.

f. Is demand elastic, inelastic, or unit elastic at the revenue-maximizing price-quantity combination?