1. If p(x) is the price (in dollars) per unit when selling x units, and C(x) is the cost to produce x units, write down a formula for the revenue R(x) from producing x units.

The revenue is given by $R(x) = x \cdot p(x)$

2. How is profit, P(x), defined if we use the functions defined in problem 1?

The profit is given by $P(x) = R(x) - C(x) = x \cdot p(x) - C(x)$.