

3. It makes sense that the price of an item will have an effect on how many people are willing to buy the item. Suppose the quantity sold, q , is a function of the price, p , in dollars. Thus we can write $q = f(p)$. Give practical interpretations of the following two statements. Include units.

a. (2 points) $f(52) = 550$.

b. (3 points) $f'(52) = -6$.

4. A company drills wells. The price, P , (in dollars) charged is a function of the depth, d , of the well (in feet). Thus we can write $P = f(d)$. Give practical interpretations of the following statements. Include units.

a. (2 points) $f(60) = 3000$.

b. (3 points) $f'(60) = 70$.