

Example 1. The elasticity of the demand for butter is 0.62. What do you expect to happen to demand if there is a 25% decrease in price? What do you expect to happen to demand if there is a 90% increase in price?

Example 2. In Fall 2013, the undergraduate enrollment at Loyola University Maryland was 3875 and the tuition was \$41850 per year (information taken from the 2013–2014 Loyola Catalogue). According to <http://centerforcollegeaffordability.org/archives/1336> the elasticity of demand for a 4 year college is 0.10.

- (a) Will a 5% increase in tuition cause total revenue to go up or go down?
- (b) Can you find a way to predict this answer without repeating all the calculations?

Example 3. The demand function of T-shirts is $q = 1500 - 125p$.

- (a) Find R when $p = \$5$.
- (b) Find E when $p = \$5$.
- (c) When $p = \$5$, find out if R is increasing or decreasing (i.e. will increasing p make R increase or decrease). Do the problem in two different ways: by using the Elasticity, and by finding R as a function of p and using the derivative.