

Extension 1

Name: _____ Date: _____

The formula for calculating a coefficient of price elasticity of demand is:

$$\frac{\% \Delta Q_D}{\% \Delta P}$$

In order to determine % change in quantity demanded, take the new Q_D – the initial Q_D and divide by the initial Q_D .

Similarly, in order to determine % change in price, take the new P – the initial P and divided by the initial P .

For example, we can calculate the price elasticity of demand for paper towels given this information:

Price	Quantity Demanded
\$1	10
\$1.50	3

% change in $Q_D = (3-10)/10 = 0.70$ (*We drop the negative sign because we are concerned about the magnitude of the change, not the direction)

% change in $P = (\$1.50-1)/1 = -.50$

Therefore, price elasticity of demand for paper towels = $0.70/0.50 = 1.4$

Price Elasticity: From Tires to Toothpicks

Directions: Calculate price elasticity of demand for each of the following.

1. Pokémon Cards

Price	Quantity Demanded
\$2	25
\$3	15

2. Starbucks Lattes

Price	Quantity Demanded
\$4	100
\$5	75

3. Plane Tickets to London

Price	Quantity Demanded
\$500	600
\$800	200

4. State Fair Corndogs

Price	Quantity Demanded
\$1	5000
\$3	4500