

### Calculating Elasticity of Demand (do this side after completing the reverse)

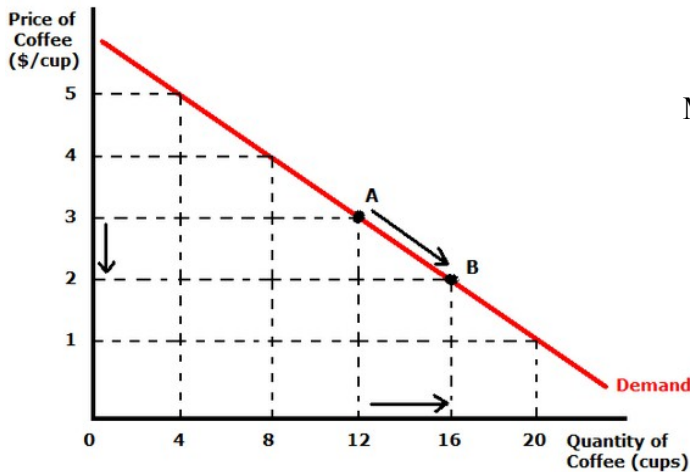
Using the midpoint method, calculate the elasticity of the following good at every segment along the demand curve (if visualizing a graph would help you, then create one). For the revenue column, multiply the price by the quantity to find the total revenue. In the up or down column, draw an “up” arrow if the revenue increases and a “down” arrow if it decreases. For coefficient, write the number you get from the midpoint method calculations. For the elasticity column, note whether the good is elastic, unit elastic, or inelastic.

Price	Quantity	Revenue	Rev up or down?	Elasticity Coefficient	Elasticity up, down, unit?
\$100.00	1				
90	2				
80	4				
70	7				
60	11				
50	15				
40	18				
30	20				
20	21				
10	21				

You can show your work here. Remember, to calculate the % change in price or quantity, subtract the new quantity from the old quantity and divide by the midpoint of the two. Give it a try!<sup>1</sup>

<sup>1</sup> Need help? Ask me and/or watch the Khan Academy video <https://www.khanacademy.org/economics-finance-domain/microeconomics/elasticity-tutorial/price-elasticity-tutorial/v/price-elasticity-of-demand>

### Exercise: Price Elasticity of Demand (do this side first)



Midpoint Formula for Price Elasticity of Demand

$$E_d = \frac{\% \text{ Change in Quantity Demanded}}{\% \text{ Change in Price}}$$

$$\text{So: } \frac{\% \Delta Q}{\% \Delta P} = \frac{\frac{Q_2 - Q_1}{(Q_1 + Q_2)/2}}{\frac{P_2 - P_1}{(P_1 + P_2)/2}}$$

According to the demand curve above, calculate the elasticity coefficient of the AB line segment using the midpoint formula. **Use the space below to show your work. Circle your answer.**

Is the demand for coffee elastic, inelastic, or unit elastic for segment AB? Explain.

Again using the above graph for coffee: In order to earn the maximum total (gross) revenue, what price should a seller use to sell their coffee?