

## 4.2 Worksheet – Calculating Elasticity of demand.

1. Otten Industries sells notebook computers for \$800 a computer. Mrs. Otten, owner, decides to decrease the price of these computers to \$750. As a result, the quantity demanded for notebook computers rose from 500 to 550.
  - a. Calculate the percentage change in price \_\_\_\_\_
  - b. Calculate the percentage change in quantity demanded \_\_\_\_\_
  - c. Calculate the elasticity of demand \_\_\_\_\_
  - d. Is it elastic, inelastic, or unit elastic? \_\_\_\_\_
  - e. Why might computers have this type of elasticity of demand?  
\_\_\_\_\_
  
2. Flu vaccinations cost \$19 per shot. If the industry decided to sell them for \$20 a shot what do you think would happen to the elasticity of demand?
  
3. Andes Central Sports, Inc. sells sports equipment. They decided to have a sale and reduce the price of their Nike shoes from \$75 per pair to \$50 per pair. As a result, the quantity demand rose from 100 shoes to 150 shoes.
  - a. Calculate the percentage change in price \_\_\_\_\_
  - b. Calculate the percentage change in quantity demanded \_\_\_\_\_
  - c. Calculate the elasticity of demand \_\_\_\_\_
  - d. Is it elastic, inelastic, or unit elastic? \_\_\_\_\_
  - e. Why might shoes have this type of elasticity of demand?  
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4. The price of gas rose from \$2.15 per gallon to \$2.27 per gallon. As a result, quantity demand went from 500 gallons per week to 495 gallons per week.
  - a. Calculate the percentage change in price \_\_\_\_\_
  - b. Calculate the percentage change in quantity demanded \_\_\_\_\_
  - c. Calculate the elasticity of demand \_\_\_\_\_
  - d. Is it elastic, inelastic, or unit elastic? \_\_\_\_\_
  - e. Why might gas have this type of elasticity of demand?  
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### Graph the following schedule and figure revenue:

Demand Schedule for Desktop Computers:

Price	Quantity Demand	Revenue
\$1,000.00	5000	
\$900.00	6000	
\$825.00	6800	
\$700.00	7500	
\$550.00	8500	

1. If the store decided to increase the price of its desktop computers from \$825 to \$900, the stores sales will fall by how many computers?
2. What is the elasticity of demand?
3. Is the price elasticity of demand elastic, unit elastic, or inelastic?
4. Will the stores total revenue increase, decrease, or remain unchanged?