## Elasticity

1. Elasticity
   1. Formula
      1. Cd = % ΔQd/% ΔP
      2. >1 = Elastic
      3. <1 = Inelastic
      4. 1 = Unitarily Elastic
   2. Midpoint Formula
      1. ((Qn-Qo)/(Qn+Qo))/((Pn-Po)/(Pn+Po))
   3. Perfect Inelastic
      1. Represented by a vertical line
      2. 0/X
   4. Perfectly Elastic
      1. Represented by a horizontal line
      2. Consumers will not buy anymore if the price goes up even just $0.01
      3. Consumers will buy all they can get their hands on
   5. Determinants
      1. Luxury vs. Necessity
      2. # Of Subsitutes
      3. % Of Inome
      4. Time

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| P | Q | TR | | Elasticity |
| 8 | 1 | 8 | | |
| 7 | 2 | 14 | 5 | | |
| 6 | 3 | 18 | 2.6 | | |
| 5 | 4 | 20 | 1.57 | | |
| 4 | 5 | 20 | 1 | | |
| 3 | 6 | 18 | .64 | | |
| 2 | 7 | 14 | .38 | | |
| 1 | 8 | 8 | .20 | | |

$3.50 / 20 gallons

$4 / 18 gallons

-3/36

1/7

0.583

$23k – 4,877

$24k - 4705

4705-4877/4705+4877

0.844

-172/ 9582

$1/47

0.01795032352327

0.02127659574468