An Application

- The government now imposes a tax $T$ on the product. What happens to consumer surplus?

- Consumer Surplus Declines

\[ \text{Surplus Lost to Taxes} \]

This is not a loss. The money is transferred to the government, and thus takes the place of other taxes.

An Application

- The demand for a product is $Q = 100-2p$.

\[ \text{Deadweight Loss} \]

This is a total loss. No one benefits from the Deadweight Loss.
• The demand for a product is \( Q = 100 - 2p \).
• The good sells for 10
• The Government imposes a tax of $5

\[ \text{New CS} = \frac{1}{2} \times 70 \times 35 = 1225 \]

\[ \text{Lost to taxes} \ 350 \]

\[ \text{DW Loss} \ \frac{1}{2} \times 10 \times 5 = 25 \]
Monopoly Pricing

- The demand for a product is $Q = 100-2p$.
- A Monopolist, who can make the product for nothing, sells it for $P = 10$.

\[ \pi = 800 \]

\[ D = 50 \]

\[ CS = 1600 \]

New CS = \[ \frac{1}{2} \times 70 \times 35 = 1225 \]

\[ \pi = 1050 \]

Lost to higher price = 350

\[ DW Loss = \frac{1}{2} \times 10 \times 5 = 25 \]
End

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