

# 1.9 Price Elasticity - Practice Problems

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The demand for monthly cell phone plans is given by:

$$q_D = 50 - 0.5p$$

1. Write the *inverse* demand function.
2. Calculate the price elasticity of demand when the price is \$10. Is this relatively elastic or inelastic?
3. Calculate the price elasticity of demand when the price is \$70. Is this relatively elastic or inelastic?
4. At what price is demand unit elastic ( $\epsilon = -1$ )?
5. Calculate the total revenue at \$10.
6. Calculate the total revenue at \$70.
7. Calculate the total revenue at the price you found for question 4.