11. If the elasticity of demand is estimated to equal -1.6, then demand is relatively elastic. A decrease in ticket prices would increase the quantity of tickets demanded sufficiently to increase the overall revenue from ticket sales. If the elasticity of demand is estimated to equal -0.4, then demand is relatively inelastic. In this case, an increase in ticket prices would boost the revenue from ticket sales.

12. The statement is only partially correct. Along a downward-sloping linear demand curve, the slope is indeed constant. However, elasticity of demand varies along a downward-sloping demand curve, decreasing as you move down to the right along the demand curve.

13. The demand is relatively elastic at prices above the midpoint of a straight-line demand curve and relatively inelastic below the midpoint, so it is relatively elastic for a price change from $12 to $10 but relatively inelastic for a price change from $6 to $4.

14. Demand is inelastic because an increase in price increases total revenue; demand is elastic because an increase in price decreases total revenue.

15. a. Total revenue increases from $200 ($4 x 50) to $300 ($3 x 100).
    b. Since total revenue increased with a decrease in price, demand must be relatively elastic.
    c. Since total revenue goes down from $300 ($2 x 150) to $200 ($1 x 200) as price falls from $2 to $1, demand must be relatively inelastic in that range of the demand curve.

16. If a price is chosen along the elastic portion of a downward-sloping linear demand curve, reductions in price will increase total revenue. If a price is chosen along the inelastic portion of a downward-sloping linear demand curve, increases in price will boost total revenue. A firm seeking to maximize total revenue should reduce price until it is no longer operating on the elastic portion of the demand curve and increase price until it is out of the inelastic range. That leaves the unit elastic point along a linear demand curve. The price that corresponds to the unit elastic point is the price at which total revenue is maximized.