

TABLE 13-1 An Elasticity Menagerie

$\text{Price elasticity of demand} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}} \quad (\text{dropping the minus sign})$	
0	Perfectly inelastic: price has no effect on quantity demanded (vertical demand curve).
Between 0 and 1	Inelastic: a rise in price increases total revenue.
Exactly 1	Unit-elastic: changes in price have no effect on total revenue.
Greater than 1, less than ∞	Elastic: a rise in price reduces total revenue.
∞	Perfectly elastic: any rise in price causes quantity demanded to fall to 0. Any fall in price leads to an infinite quantity demanded (horizontal demand curve).
$\text{Cross-price elasticity of demand} = \frac{\% \text{ change in quantity demanded of one good}}{\% \text{ change in price of another good}}$	
Negative	Complements: quantity demanded of one good falls when the price of another rises.
Positive	Substitutes: quantity demanded of one good rises when the price of another rises.
$\text{Income elasticity of demand} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}}$	
Negative	Inferior good: quantity demanded falls when income rises.
Positive, less than 1	Normal good, income-inelastic: quantity demanded rises when income rises, but not as rapidly as income.
Greater than 1	Normal good, income-elastic: quantity demanded rises when income rises, and more rapidly than income.
$\text{Price elasticity of supply} = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}}$	
0	Perfectly inelastic: price has no effect on quantity supplied (vertical supply curve).
Greater than 0, less than ∞	Ordinary upward-sloping supply curve.
∞	Perfectly elastic: any fall in price causes quantity supplied to fall to 0. Any rise in price elicits an infinite quantity supplied (horizontal supply curve).