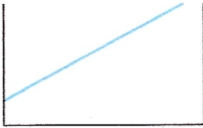
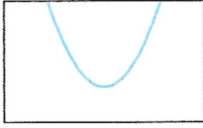
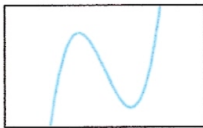
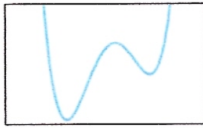
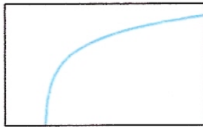
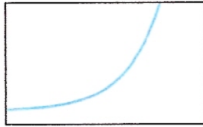
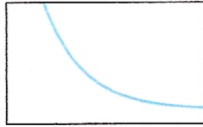
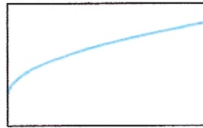
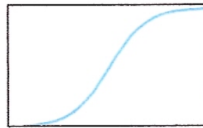
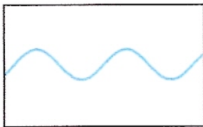


Regression Type	Equation	Graph	Applications
Linear (Chapter 2)			Fixed cost plus variable cost, linear growth, free-fall velocity, simple interest, linear depreciation, many others
Quadratic (Chapter 2)			Position during free fall, projectile motion, parabolic reflectors, area as a function of linear dimension, quadratic growth, etc.
Cubic (Chapter 2)			Volume as a function of linear dimension, cubic growth, miscellaneous applications where quadratic regression does not give a good fit
Quartic (Chapter 2)			Quartic growth, miscellaneous applications where quadratic and cubic regression do not give a good fit
Natural logarithmic (ln) (Chapter 3)			Logarithmic growth, decibels (sound), Richter scale (earthquakes), inverse exponential models
Exponential ( $b > 1$ ) (Chapter 3)			Exponential growth, compound interest, population models
Exponential ( $0 < b < 1$ ) (Chapter 3)			Exponential decay, depreciation, temperature loss of a cooling body, etc.
Power (requires $x, y > 0$ ) (Chapter 2)			Inverse-square laws, Kepler's third law
Logistic (Chapter 3)			Logistic growth: spread of a rumor, population models
Sinusoidal (Chapter 4)			Periodic behavior: harmonic motion, waves, circular motion, etc.