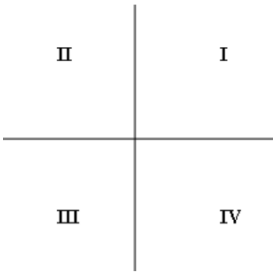
Section 3.1 Graphs of Polynomial Functions



Complete the tables to help you compare the graphs of different polynomial functions.

Set	Function	Sketch	End Behavior Q# to Q#	Degree	Leading Coefficient
A (odd degree)	Linear $y = x$				
	Cubic $y = x^3$				
	Quintic $y = x^5$				
	Linear $y = -x$				
	Cubic $y = -2x^3$				
	Quintic $y = -2x^5$				
B (even degree)	Quadratic $y = x^2$				
	Quartic $y = x^4$				
	Quadratic $y = -3x^2$				
	Quartic $y = -2x^4$				

Set		Function	Degree	Constant Term	Value of *y*-intercept	Number of *x*-Intercepts
C (odd degree)	Linear	$y = x + 1$				
	Cubic	$y = x^3 + 4x^2 + x - 6$				
	Cubic	$y = x^3 - 2$				
	Quintic	$y = x^5 + 3x^4 - 5x^3 - 15x^2 + 4x + 12$				
	Quintic	$y = x^5 - 3$				
D (even degree)	Quadratic	$y = x^2 + 5x + 6$				
	Quadratic	$y = x^2 + 4$				
	Quartic	$y = x^4 + 2x^3 - 7x^2 - 8x + 7$				
	Quartic	$y = x^4 + 2$				