

Summary of the Characteristics of Polynomial Functions

	Degree	Maximum # of x-intercepts	End behaviour	# of Max/Min
Linear				
Quadratic				
Cubic				
Quartic				
Quintic				

For odd-degreed functions

- the minimum number of x-intercept is _____
- the maximum number of x-intercepts is _____
- the number of maximums and minimums is _____
- the end behaviour is _____ for functions with a positive leading coefficient
- the end behaviour is _____ for functions with a negative leading coefficient

For even-degreed functions

- the minimum number of x-intercepts is _____
- the maximum number of x-intercepts is _____
- the number of maximums and minimums is _____
- the end behaviour is _____ for functions with a positive leading coefficient
- the end behaviour is _____ for functions with a negative leading coefficient

Sketch a positive cubic function with one zero	Sketch a positive quartic function with no zero
Sketch a positive cubic function with 2 zeros	Sketch a positive quartic function with 2 zeros
Sketch a positive cubic function with 3 zeros	Sketch a positive quartic function with 3 zeros
Sketch a negative cubic function with one zero	Sketch a positive quartic function with 1 zero
Sketch a negative cubic function with 2 zeros	Sketch a negative quartic function with no zero
Sketch a negative cubic function with 3 zeros	Sketch a negative quartic function with 2 zeros
	Sketch a negative quartic function with 3 zeros
	Sketch a negative quartic function with 1 zero

