## Unit 2 Polynomials: Review – Characteristics of Polynomials

Identify the characteristics for the following polynomials:

	1.	$f(x) = -x^3 - 2x^4 + x + 3$					
		Standard form		Leading Coefficient		Degree	
		# of Zeros Classify by degree		Classify by # of terms			
		End Behavior: as $x \to +\infty$ , f(x)	<) →	as x → - ∞, f(x	<li>≤) →</li>	_ # of Turns	
2. $f(x) = 3x - 5 + x^2$							
		Standard form		Leading Coefficient		Degree	
		# of Zeros Classify by degree		Classify by # of terms			
		End Behavior: as $x \to +\infty$ , $f(x) \to $		as x → - ∞, $f(x)$ →		_ # of Turns	
	3.	f(x)= 4x					
		Standard form		Leading Coefficient		Degree	
	# of Zeros Classify by degree Classify by # of ter				ify by # of terms		
	End Behavior: as $x \to +\infty$ , $f(x) \to \_$ as $x \to -\infty$ , $f(x) \to \_$ # of T					_ # of Turns	
4.		٥ 	Domain		Absolute Ma	aximum	
		6			nimum		
		4				asing	
					Int. of Decre	ecreasing havior:	
			# of Extrem	a	End Behavio		
				ximum	as $x \rightarrow +$	$\rightarrow$ +∞, f(x) $\rightarrow$	
				imum	as x $\rightarrow$ -	as $x \to -\infty$ , $f(x) \to$	
5.		▲ ··					
			Domain		Absolute Maximum		
		12	Range		Absolute Mi	nimum	
		Y-intercept			Int. of Increa	easing creasing	
					Int. of Decre		
	-	-4 -2 0 2 4	# of Extrem	a	End Behavio	Behavior:	
			Relative Max	ximum	as x $\rightarrow$ +	∞, f(x) →	
		Relative M		imum	as x $ ightarrow$ -	as $x \to -\infty$ , $f(x) \to$	