Always, Sometimes, or Never True?

Directions: Read the statement, then circle the appropriate classification of the statement. Include an example that supports your classification, and a non-example if it applies.

Statement	Classification	Example/Counterexample
Cubic means the highest power of x is 3.	Always True Sometimes True Never True	
A quadratic will have two x-intercepts because it makes a U shape.	Always True Sometimes True Never True	
An odd degree will always have an x-intercept.	Always True Sometimes True Never True	
The function $y=2x^2-3x+6$ has two zeros.	Always True Sometimes True Never True	
Polynomials make curved lines when graphed.	Always True Sometimes True Never True	
The leading coefficient determines how steep the curve is.	Always True Sometimes True Never True	
A polynomial must have at least three terms.	Always True Sometimes True Never True	
The number of intercepts depends on the highest degree.	Always True Sometimes True Never True	

The function $y=x^5+3x^3+7$ has one real solution.	Always True Sometimes True Never True	
Polynomials with an even degree have the same end behavior.	Always True Sometimes True Never True	
4^{th} degree polynomial functions look like quadratic functions.	Always True Sometimes True Never True	
Cubic graphs will continuously increase, therefore don't have a minimum or maximum.	Always True Sometimes True Never True	
Polynomials with an odd degree will have opposite end behavior.	Always True Sometimes True Never True	
The number of turning points depends on the highest degree of the function.	Always True Sometimes True Never True	
The constant effects the steepness of the curve.	Always True Sometimes True Never True	