

Math 163A Handout 4: Table of Equivalent Statements

Statements about f	Statements about f'	Statements about f''
f is zero		
f is positive		
f is negative		
f is horizontal	f' is zero	
f is increasing	f' is positive	
f is decreasing	f' is negative	
f is not concave	f' is horizontal	f'' is zero
f is concave up	f' is increasing	f'' is positive
f is concave down	f' is decreasing	f'' is negative