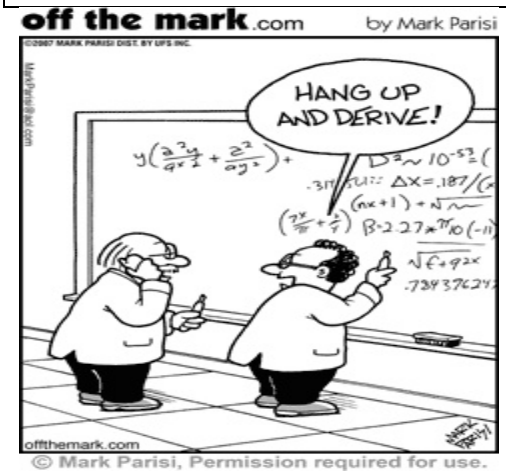
MCV 4U

UNIT 3 – Application of the Derivative

Lesson	Topic	Page	Exercises / Worksheet
1-2	Higher Order Derivatives: Velocity & Acceleration	127	Handout plus # 2, 3bef, 4-16
3	Maximum and Minimum Values	135	# 1 odd, 2, 3-4 odd, 7-10, 12
	Mid-Chapter Review **QUIZ**	139	# 1c, 2-4, 5c, 7bdf, 9-10
≈4-6	Optimization	145-147	# 1-16, 18-20
≈7-9	Optimization (Economics)	151-154	#1-7, 10, 13-14
	QUIZ		
10	Related Rates & Implicit Differentiation (perhaps – time permitting)		Handout
11	Assignment		
12	Review	156	#1-30 (try as much as you can)
13	**Chapter Test**		

Career Connection – Economic Predictions

Economics studies the way a society uses scarce resources, such as capital, land, labour, raw materials and equipment, to provide goods and services. Furthermore, economists analyse the results of their research to determine the costs and benefits of making, distributing, and using resources in particular way. In seeking to **optimize** the use of these resources, economists employ many tools that are similar to those used in Calculus optimization problems. The mathematical models of economics are critical in predicting the nature and length of business cycles, the effects of a specific rate of inflation on the economy, the effects of tax legislation on unemployment levels, or the likely movement of interest rates.



If Leibniz found himself struggling with notation he would often break for a biscuit. Usually a Fig Newton.