Name:	Math 130 Day 16 Lecture Worksheet
Date:	Sections 10.1 and 10.3: Hypothesis Tests for a Population Mean

Ex 1 (Sec. 10.3 Hw #18 pg. 504): **TVaholics** According to the American Time Use Survey, the typical American spends 154.8 minutes (2.58 hours) per day watching television. Do Internet users spend less time each day watching television? A survey of 50 Internet users results in a mean time watching television per day of 128.7 minutes, with a standard deviation of 46.5 minutes. Conduct the appropriate test to determine if Internet users spend less time watching television at the $\alpha = 0.05$ level of significance

Ex 2 (Sec. 10.3 Hw #22 pg. 504): **Reading Rates** Michael Sullivan, son of the author, decided to enroll in a reading course that allegedly increases reading speed and comprehension. Prior to enrolling in the class, Michael read 198 words per minute (wpm). The following data represent the words per minute read for 10 different passages read after that course.

Reading Rates						
206	217	197	199	210	n =	
210	197	212	227	209	xbar =	
					s =	

Was the class effective? Use the $\alpha = 0.10$ significance level.

Ex 3 (Sec. 10.3 Hw #19 pg. 504): Age of Death-Row Inmates In 2002, the mean age of an inmate on death row was 40.7 years, according to data obtained from the U.S. Department of Justice. A sociologist wondered whether the mean age of death-row inmates has changed since then. She randomly selects 32 death-row inmates and finds that their mean age is 38.9, with a standard deviation of 9.6. At the $\alpha = 0.05$ significance level, test the claim that the mean age of death-row inmates has changed since 2002.