Biology 4605/7220 NAME_____
16 September 2015 Quiz #2a

1. Stebbins (1950 Table 9) reported data from Reid and Reid (1915) on extinction rates in woody and herbaceous species of the early Pliocene in Northwestern Europe.

		Woody	Herbaceous
		Nspecies	Nspecies
Modern species	*N_s*	25	31
Modern genera	*N_g*	56	70
Unidentified	*N_unid*	13	22
	Total	94	123

Calculate

a. Proportion of all Woody plants that belong to modern species. p_W = _____[1]

Proportion of all Herbaceous plants that belong to modern species. p_H = _____[1]

Odds of extinction of modern species
where Odds_W = p_W / (1- p_W) Odds_W = _____[1]

Odds_H = _____[1]

Odds ratio: OR = (Odds_W) / (Odd_H) OR = _____[1]

b. Mean extinction rate of modern species N_s. mean(N_s) = _____[1]

CV= st.deviation/mean $CV(N\_s)$ = 0.152 st.deviation(N_s) = _____[1]

t = (mean - μ) / st.deviation If μ = 0, calculate t _____[1]

2. 1 acre = 1 rod X 1 furlong 1 rod = 22 yards 1 furlong = 220 yards

m = 1.098 yards

0.248 acres = _____ yards^2 [1]

show your work [2]

0.248 acres = _____ m^2 [1]

show your work [2]