Biology 4605/7220   Name _____Key_____
Quiz #6b   21 October 2002

1. Snedecor and Cochran (*Statistical Methods* 1989, p151) reported soybean heights
(Hbean = cm) in relation to age (Age = 1 to 7 weeks).

$$Hbean = -0.571 + 6.143\, Age$$

For the midpoint in age, at 4 weeks, what is the
predicted height of soybeans ?   ___24 cm_____

What is the predicted height of soybeans 3 weeks later ?   ___42.43 cm____

For each increase in age by 1 week,
what is the increase in height of soybeans ?   ___6.143 cm/wk____

The regression equation was estimated from 7 pairs height and age data (n = 7).
Complete the source and degrees of freedom columns of an ANOVA table.

Source   df
regression   1
error   5
total   6

2. Complete the following ANOVA table (Snedecor and Cochran 1989, p335)

SOURCE	DF	SS	MS	F	p
Regression	1	2295.3	2295.3	16.15	0.001
Error	15	2131.2	142.08		
Total	16	4426.5			