## Math 6010, Fall 2004: Homework

**Homework 1** Consider the following hypothetical data; it is regarding a particular bird species:<sup>1</sup>

Wing length (cm)	Age (days)
1.5	4.0
2.2	5.0
3.1	8.0
3.2	9.0
3.2	10.0
3.9	11.0
4.1	12.0
4.7	14.0
5.2	16.0

Use simple linear regression to predict the age of a newly-caught bird whose wing is 4.0 centimeter long. Assuming normal errors, test the hypothesis (95%) that wing length and age are linearly related.

<sup>1</sup>Borrowed from http://math.hws.edu/javamath/ryan/Regression.html