Biology 4605/7220 NAME_____
28 September 2015 Quiz #4b

1a. Complete the following table for ages of mothers of students in this course in 2009. [6]

x	F(Age=x)	F(Age=x)/n	F(Age≤x)	F(Age<x)/n
18			2	
23			12	
28			28	
33			42	
38			46	
43			46	

1b. Assuming a normal distribution of ages of mothers, the expected frequency, in 2009, is E(F[Age=x]) = 1.84 for the age group 16-20. Write a data equation for this age group.

_____ = _____ + _____ [3]
Data value Model value residual

2. For each of the following decisions, (a) state the "no effect" or null hypothesis; (b) state the decision made relative to this hypothesis; (c) identify whether the decision is at risk of Type I or Type II error.

The government of Alberta decides not to fund a study of the Zamboni surgical treatment for multiple sclerosis.
(a) [1]

(b) [1]
(c) [1]

An horticulturalist concludes that a new fertilizer increases the number of blossoms per plant.
(a) [1]

(b) [1]
(c) [1]