

1. Construct both cumulative frequency distributions from the following frequency distribution of ages of mothers of students in the quant. course in 1998.

T = age in years. n = number of students. F(T= k) is the frequency with which the quantity T is equal to the fixed value k, where k is the midpoint of each class.

<u>Age</u>	<u>k</u>	1998 F(T= k)	F(T≤ k)	F(T≤ k)/n	F(T= k) in 2003
15-20	17.5	11	_____	_____	2
21-25	23.5	19	_____	_____	7
26-30	28.5	18	_____	_____	12
31-35	33.5	7	_____	_____	4
36-40	38.5	0	_____	_____	2
41-45	43.5	0	_____	_____	0

2. Identify two differences between the distribution in 1998 and 2003.

3. Identify whether the following are Type I or Type II errors by circling the correct type.

a. A drug company fails to control for placebo effects and concludes that a new drug cures the common cold. I II

b. An agency mistakenly concludes that low level jet training has no environmental impact. I II

c. By mistake an aquaculture researcher adds the same food to treatment and control groups, then concludes that the food assigned to the treatment group increases growth. I II