

**Stat 479**  
**Fall 2010**  
**Quiz 8**  
November 2, 2010

1. You are given the following information on 23 lives in a one year mortality study.

<b>Life</b>	<b>Time of Entry</b>	<b>Time of Termination</b>	<b>Cause of Termination</b>
1	0	.5	Lapse
2	0	.2	Death
3	0	.6	Death
4	0	.6	Lapse
5	0	.8	Death
6	0	.7	Lapse
7-20	0	1	End of Study
21	.2	.6	Death
22	.5	.9	Lapse
23	.7	1	End of Study

Calculate  $\hat{S}_{23}(0.9)$  using the Nelson-Åalen estimate.

2. You are given following information about claims from automobile accidents occurring on Purdue Campus:

<b>Amount of Claim</b>	<b>Number of Claims</b>
0-1000	700
1000-2500	150
2500-5000	90
5000-10,000	40
Over 10,000	20

Using the ogive, calculate  $F_{1000}(x)$  for  $2500 \leq x \leq 5000$ .