

MAP 4175 / 5177  
Tests 6

Name: \_\_\_\_\_ Date: October 9, 2019

Show all work for full credit, and use correct notation. Simplify answers completely.

You are given the following data: (Dashes indicate missing values.)

$i$	$y_i$	$s_i$	$b_i$	$r_i$
1	3	3	-	50
2	5	4	4	40
3	7	8	2	-
4	11	-	-	-
5	16	6	-	17
6	20	-	3	-

1. Compute the Kaplan-Meier estimate  $S_{50}(8)$ .
  2. Compute the Nelson-Aalen estimate  $\hat{H}(8)$ .
  3. Let  $A$  denote the approximate value of the standard deviation of the estimator for  $S(8)$  using Greenwood's formula, and let  $B$  denote the approximate value of the standard deviation of the estimator for  $S(8)$  using Klein's formula. Determine the value of  $A - B$ .

Numbers 4 and 5 use the following data:

In a mortality study on 12 dragons, you are given the following observed exit times:

3+      4+      5      5      5+      6+      7      7      7      8      9      9+