

Question #264

Key: D

With no censoring the r values are 12, 9, 8, 7, 6, 4, and 3 and the s values are 3, 1, 1, 1, 2, 1, 1 (the two values at 7500 are not needed). Then,

$$\hat{H}_1(7000) = \frac{3}{12} + \frac{1}{9} + \frac{1}{8} + \frac{1}{7} + \frac{2}{6} + \frac{1}{4} + \frac{1}{3} = 1.5456.$$

With censoring, there are only five uncensored values with r values of 9, 8, 7, 4, and 3 and all five s values are 1. Then,

$$\hat{H}_2(7000) = \frac{1}{9} + \frac{1}{8} + \frac{1}{7} + \frac{1}{4} + \frac{1}{3} = 0.9623. \quad \text{The absolute difference is 0.5833.}$$