Question #30
Key: E

$.542 = \hat{F}(n) = 1 - e^{-\hat{H}(n)}$, $\hat{H}(n) = .78$. The Nelson-Aalen estimate is the sum of successive s/r values. From the problem statement, $r = 100$ at all surrender times while the s-values follow the pattern 1, 2, 3, …. Then,

$.78 = \frac{1}{100} + \frac{2}{100} + \cdots + \frac{n}{100} = \frac{n(n+1)}{200}$ and the solution is $n = 12$.