

88. The waiting time for the first claim from a good driver and the waiting time for the first claim from a bad driver are independent and follow exponential distributions with means 6 years and 3 years, respectively.

What is the probability that the first claim from a good driver will be filed within 3 years and the first claim from a bad driver will be filed within 2 years?

(A) $\frac{1}{18}(1 - e^{-2/3} - e^{-1/2} + e^{-7/6})$

(B) $\frac{1}{18}e^{-7/6}$

(C) $1 - e^{-2/3} - e^{-1/2} + e^{-7/6}$

(D) $1 - e^{-2/3} - e^{-1/2} + e^{-1/3}$

(E) $1 - \frac{1}{3}e^{-2/3} - \frac{1}{6}e^{-1/2} + \frac{1}{18}e^{-7/6}$