57. XYZ Co. has just purchased two new tools with independent future lifetimes. Each tool has its own distinct De Moivre survival pattern. One tool has a 10-year maximum lifetime and the other a 7-year maximum lifetime.

Calculate the expected time until both tools have failed.

(A)   5.0

(B)   5.2

(C)   5.4

(D)   5.6

(E)   5.8