

The Infinite Actuary Exam STAM Online Course
A.2.5. Practice Problems on Uniform Distributions

1. [4B.F95.28] Two numbers are drawn independently from a uniform distribution on $[0, 1]$. What is the variance of their product?
- A. $1/144$ B. $3/144$ C. $4/144$ D. $7/144$ E. $9/144$

2. Suppose that X is an exponential random variable with mean θ , where θ is a continuous uniform on $(0, 2)$.

Find the mean of X .

A. 0.5

B. 1.0

C. 1.5

D. 2.0

E. 2.5

3. Suppose that X is an exponential random variable with mean θ , where θ is a continuous uniform on $(0, 2)$.

Find the variance of X .

- A. 1 B. $4/3$ C. $5/3$ D. $6/3$ E. $7/3$