5. Exercise: Chebyshev inequality

Exercise: Chebyshev inequality

1/1 point (graded)
Let Z be normal with zero mean and variance equal to 4. For this case, the Chebyshev inequality yields:

$\mathbf{P}\big(|Z| \geq 4\big) \leq$ | 1/4 | ✔ **Answer:** 0.25

Solution:

We have

$$\mathbf{P}\big(|Z| \geq 4\big) \leq \frac{\mathsf{Var}(Z)}{4^2} = \frac{4}{4^2} = \frac{1}{4}.$$

提交   You have used 2 of 3 attempts

ℹ   Answers are displayed within the problem

讨论

显示讨论

Topic: Unit 8 / Lec. 18 / 5. Exercise: Chebyshev inequality