

MIT Introduction to Statistics 18.05 Reading 6A

Think Questions

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1 References and License

We are answering questions in the material from MIT OpenCourseWare course 18.05, Introduction to Probability and Statistics.

In this document we are answering questions Orloff and Bloom ask in [1].

Please see the references section for detailed citation information.

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2 The mean does not divide probability mass in half.

The mean value of a continuous random variable X does not necessarily divide the area under the curve of its probability mass function because we may have the case where more values X occur where X is greater (or less than) the median value of X .

3 Questions on $X \sim \mathbf{U}(0, 4)$

References

- [1] Jeremy Orloff and Jonathan Bloom. *Reading Questions 6a*. Available at <https://ocw.mit.edu/courses/mathematics/18-05-introduction-to-probability-and-statistics-spring-2014/readings/reading-questions-6a/> (Spring 2014).