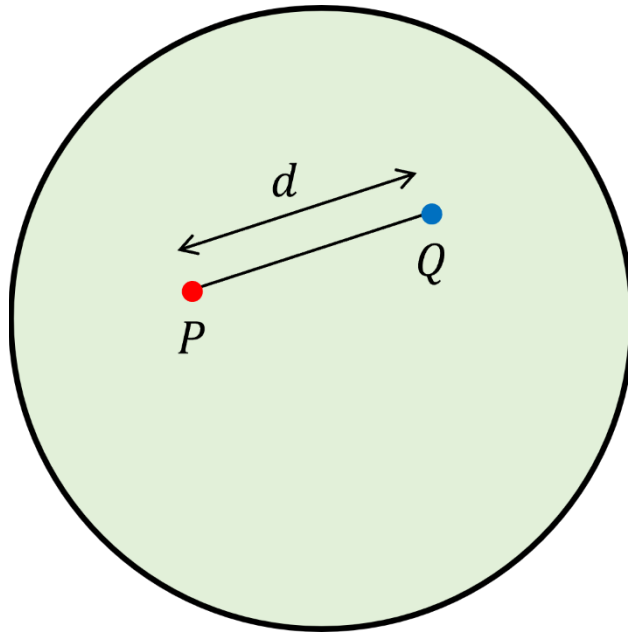


# UC Merced Applied Math Problem of the Month

February 2022



Choose two random points in a unit disk (i.e. circle with radius 1). Each point is uniformly distributed and the two points are independent of each other.

- What is the average distance between the two points?
- What is the probability that the distance is less than 1?

If your answers are numerical values, please round them to three decimal places.

To submit your solutions for a chance to win an Amazon gift card, and to find out detailed contest rules,

- scan the QR code to the right, or
- go to <https://appliedmath.ucmerced.edu/news-events/problem-month>

