1158-97-22   **Peter Tannenbaum*** (`petertannenbaum@gmail.com`), Santa Barbara, CA. *The Shortest Distance Between Three Points.*

Given three random points on the plane, what is the most efficient way to connect them? This seemingly simple question turns out to be surprisingly deep and multi-layered, touching on a wide swath of secondary school mathematics. While neither a game nor a puzzle, the question (and a series of subsequent questions that potentially follow it) seems particularly well suited for Math Circle exploration and experimentation. In this talk I will suggest a few of the many ways to pursue this. If time permits I will also perform a couple of magic tricks. (Received February 05, 2020)