

Motion or Picture?

Identify whether the data for each description is considered Continuous or Discrete:

1. A person's height
2. Time in a race
3. Number of students in a class
4. The length of a leaf
5. The sum of two six sided dice
6. Colors of a rainbow
7. Water dripping out of a leaky faucet
8. Water flowing out of a faucet
9. A motion picture

This idea of discrete vs. continuous is important to be aware of as we study Calculus. We will get further into when and why at the appropriate concepts. This last one, motion, is based on the work of a fifth century B.C. mathematician, Zeno of Elea. Zeno posed several paradoxes to challenge the ideas of motion, space, and time. What are some of these paradoxes and which one do you think resembles the motion picture example?