

Earth vs. a Basketball

- The Earth's diameter is 7926 miles. From the highest point (Mt. Everest) to the lowest point (Marina trench) the "roughness" of the Earth's surface is $5.5+6.8 = 12.3$ miles.
 - What is the ratio of the roughness of the Earth's surface to the Earth's diameter?
- Would you characterize the Earth as lumpy or smooth in comparison to a basketball? **Justify your answer in one or two sentences by discussing the numbers in these questions.**
- **NOTE:** A basketball's diameter is ~ 25 cm. The bumps on a basketball's surface are ~ 1 mm high.

