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AST 9: Homework 8

1] Fill out the first four lines on the Planets table I gave you. You may have to do a web search for some values for Earth (eccentricity, etc.) or a hunt in your notes.

2] One column heading says **Orbit "radius"**. Why the quotation marks?

3] Take the square root of each number in that column. Cube your answer, then multiply by 365. (For example, for Mercury calculate $\sqrt{39}$, cube that answer and multiply by 365.) Do you get a number that closely matches another number in the row for that planet? If so, why?

4] While I gave you day and night temperatures for the other planets, I gave you only one temperature for Venus. Why?

5] Mars has half the radius of Earth, but its *land* area is close to that of Earth. Ponder. Then explain.

6] Is there liquid water on Mars? Was there liquid water on Mars?

7] Why does Mars have seasons?

8] This is a photo of the rusty medical building at Stony Brook. What does it have to do with Mars?