Mercury exhibits a resonance between its rotation period and its orbital period.

- T
- F
• T. It is true!
• Mercury rotates 3 times for every two times it orbits the sun.
• Neat, eh?
Mercury’s surface shows evidence for early meteorite bombardment, just like the Moon.

T
F
IQ

- The correct answer is T.
- The meteoritic cratering on the surface of Mercury occurred early in its history.
- The intercrater plains are probably lava flows, but they are older than the craters (in contrast to the Moon’s maria).
IQ

- Venus is Earth’s twin.
- T
- F.
IQ

- OK, I couldn’t resist. It’s a trick question with no simply true or false answer.
- Venus is about the same size and density as Earth.
- The climate on Venus is very different from Earth’s. In particular, it is deadly!
IQ

- The surface temperature of Venus is hot, hot, hot because of the greenhouse effect.

- T
- F
IQ

- T. Yes, indeed!

- Venus is hot because greenhouse gases trap so much solar energy.

- The surface of Venus is the hottest place in the solar system – hotter even than the surface of Mercury.
IQ

• What will happen to your umbrella during a rain shower on Venus?

A. Nothing. It can’t rain on Venus.
B. Nothing. You can’t open an umbrella under the intense pressure.
C. Nothing. It will dissolve.
D. Nothing. Solar radiation will cause it to evaporate.
A. or C. Your umbrella will dissolve, because rain on Venus is largely sulfuric acid. Unfortunately, it is so hot on Venus that even sulfuric acid rain never reaches the surface!

Of course, you’d also be crushed by the immense gas pressure of the unbreathable CO₂ atmosphere.