How are each of these observations supported by Ptolemy’s geocentric model of the solar system and/or the Copernican model in which the Sun is at the center of the Solar System?

(Some useful definitions- Orbiting: A complete revolution on a path around a different planetary body; Spin: Rotating on an axis, but not translating in space)

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| **OBSERVATIONS** | **Geocentrism: Sun and Planets revolve around the (PTOLEMY)** | **Heliocentrism: Earth and Planets revolve around the Sun(COPERNICUS)** |
| 1. Sun rises in E and sets in W, on a 24 hour schedule | Sun’s Orbit | Earth’s Spin |
| 2. Moon goes from fully illuminated to dark in 29 days | Moon’s rotation | Moon’s rotation |
| 3. Sun and planets all move in a single plane in space, called “the ecliptic” | Orbits of sun & planets | Orbits of Earth & planets |
| 4. The Sun does not cover the same stars in the sky, but moves through 12 more-or-less equal parts, which define the zodiac. | Stars’ orbit | Stars’ orbit |

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| 5. Some planets (Mars, Jupiter, and Saturn) all appear to have retrograde motion at some times (move from west to east) | Planet’s orbits | Planet’s orbits |

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| 6. Shadows (phases) on Venus |  |  |