# SOLAR SYSTEM

From #8, angle of Jupiter = 5 * angle of Mars. Since all angles are multiples of 45°, and 0° and 0° is impossible (it would contradict #4), Mars is at 45° and Jupiter at 225°.

From #2, three planets with consecutive orbits on the same line could be Mercury-Venus-Earth or Venus-Earth-Mars (contradicts #5), Earth-Mars-Jupiter (this is a possibility), Mars-Jupiter-Saturn or Jupiter-Saturn-Uranus (but we already know Jupiter and Saturn are on different lines) or Saturn-Uranus-Neptune (contradicts #6). So Earth is on the same line as Mars and Jupiter, and since (from #5) it can't have the same angle as Mars, Earth is at 225°.

From #6, angle of Neptune + 225° = angle of Uranus. Since the angles don't wrap around the circle, the possibilities are only 0° and 225° (violates #2), 45° and 270° (violates #2) or 90° and 315°. So Neptune is at 90° and Uranus is at 315°.

From #1, there are now exactly three angles left without planets on them: 0°, 135° and 270°. Finally, from #7 angle of Venus = 2 * angle of Mercury. Since we can't add any more planets to angles 0°, 45°, 135° and 270°, the only possibility is to place Mercury at 90° and Venus at 180°.
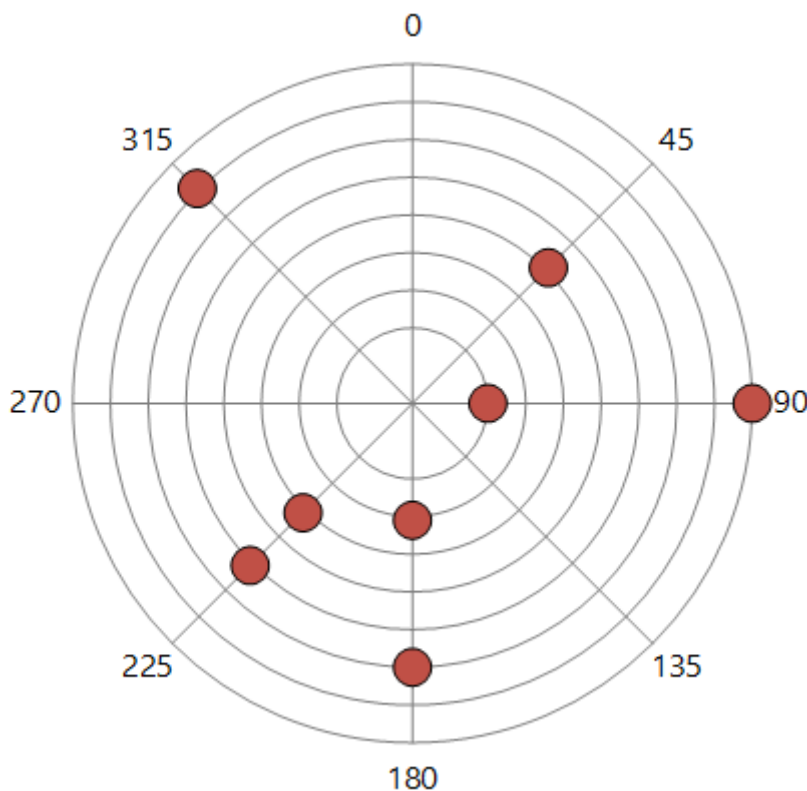
After the planets' positions are determined, the answer can be read from them as follows: take pairs of planets on consecutive orbits, starting from the innermost planets and proceeding to outermost ones, and convert each pair's positions to a letter using flag semaphore. So, the first pair of planets are at angles 90 and 180, which corresponds to F, the second pair are at angles 180 and 255, which corresponds to A, etc.

ANSWER: FALLACY