Answer these questions on angel at Lessons > Homework > Homework 8

1. (3 pts.) Your parents ask, “How do astronomers know that the Big Bang did happen?” Write a simple answer for your parents, who, let’s assume, are not scientists.

2. Simplicio reasons, “The universe is expanding. Hoag’s object, being part of the universe, is expanding too. Therefore Hoag’s object is steadily moving away from us, and Hoag’s object is getting bigger.”
   a. (3 pts.) Modify Simplicio’s statement so that it is correct.
   b. (3 pts.) What is the root cause of Simplicio’s misconception?
   c. (0 pts.) What is the big idea behind this question?

3. (3 pts.) Simplicio thinks, “Penzias and Wilson probably detected the radiation from lots of dust in the plane of the Milky Way Galaxy. The radiation is not from the Big Bang.” What evidence did Penzias & Wilson have that refutes Simplicio's statement?

4. (3 pts.) Simplicio thinks, “Penzias and Wilson probably detected the radiation from the evergreen trees nearby. Their radio antenna will receive signals even when not pointed directly at the trees, just as my satellite dish gets a signal even when not pointed directly at the satellite. The radiation is not from the Big Bang.” What evidence did Penzias & Wilson have that refutes Simplicio's statement?