Name: Regular Lab Day (Tues,Thurs):

**Lab #5 Quiz: Parallax**

**Instructions:** Have your laboratory checked by the instructor or TA, and then answer all of the questions below. You are welcome to refer back to your laboratory handout to answer the questions; in fact, for some questions, it’s necessary.

1. Over the course of a year, the bright star Sirius appears to move back and forth a **total** of 0.76 arcseconds relative to more distant, background stars. What is the distance to Sirius in parsecs?
2. In this lab, you measured the distance to two lamp posts on campus. Why is your measurement of the distance to the nearer lamppost probably more accurate?
3. In the WWT exercise, we shifted our perspective to a position six light years away, and saw that the Big Dipper looked different. Why don’t we see the same changes in the relative positions of the stars in the Big Dipper as the Earth moves from one side of the Sun to the other in its orbit?
4. In each part of the lab, we made our parallax measurements relative to a distant object (either a distant star, or a distant church steeple). Explain why it’s necessary to measure the direction to a distant object to measure the parallax of more nearby objects.