

## AOSC 433/633 & CHEM 433/633 Atmospheric Chemistry & Climate

### Admission Ticket, Lecture 03

**Due: Thursday, 31 January 2013 (at start of class)**

**8 points**

**Your name:**

1. (4 points) In Lecture 01, we learned that CO<sub>2</sub> is currently at 394 ppm and rising. Express this value for the abundance of atmospheric CO<sub>2</sub> as the numerical fraction of total air molecules that happen to be CO<sub>2</sub>, using scientific notation.

2. (4 points) Transport of pollutants is a major concern for federal and state agencies. Temperature inversions often trap pollutants in the area where they are emitted. Suppose a small factory located near a residential area receives complaints that emissions from the factory are degrading local air quality. In response, the factory manager decides to only operate at night.

Is this a good solution to the air pollution problem?

If so, briefly state why. And if not, briefly state why.