

CS 100 Exercise 1: Algorithms
Summer 2001
Due in lecture, Tuesday June 26

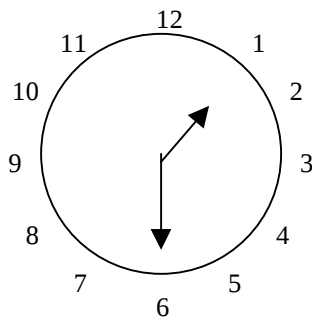
Name: _____ **Netid:** _____

1. Objective

The purpose of this exercise is to gain experience with reading and refining algorithms, and to explore the ambiguity inherent in natural language.

2. The Clock Algorithm

The following image is a simple representation of a clock:



Here is the algorithm used to construct this clock:

1. Draw a circle.
2. Put the numbers 1 through 12 around the outside of the circle.
3. Draw an arrow from the center of the circle to the 6.
4. Draw a shorter arrow from the center of the circle to a point between the 1 and the 2.

Following the same directions, draw an alternate solution (it must completely conform to the given directions!):

(see other side)

3. A Better Clock Algorithm

Which algorithm steps are ambiguous? Rewrite the algorithm more precisely to assist someone else in following it (you can change the number of steps if you like):