## Round 1

This section consists of 4 problems. You have 1 hour and 45 minutes to work on these problems. Your output must EXACTLY match the output given in the samples.

## The Lazy Time Traveler

True laziness is achieved when one spends more effort avoiding work than working in the first place.

## **Description**

A very lazy time traveler lives on the equator of the Earth. Like many time travelers, he loves to travel! Paris, Cairo, Disney World — it would be a waste to only explore different times! Unfortunately, however, our Mr. Time Traveler is cripplingly lazy. Lucky for him, his time machine can help! If he simply travels in time, and lets the Earth rotate underneath his time machine, he can force places to come to him — brilliant!

Your task is simple — given a starting location (in degrees), and a desired ending location (again, in degrees), calculate how long the time traveler will need to travel in time to arrive at his destination. Remember, the Earth spins  $360^{\circ}$  every 24 hours.

## **Example Input/Output**

You will be given a starting location  $s \in [0,360]$  and an ending location  $e \in [0,360]$ , separated by spaces. You must output a time, in hours between -12 and 12.

input: 0 360
output: 0.0

input: 320 200
output: -8.0