Homework 3
Discussion Date: September 22

**Problem 1.** Prove that \( \arctan(1) + \arctan(2) + \arctan(3) = \pi \).

**Problem 2.** The area \( T \) and an angle \( \gamma \) of a triangle are given. Determine the lengths of the sides \( a \) and \( b \) so that the side \( c \), opposite the angle \( \gamma \), is as short as possible.