MATH 476 – College Geometry

Homework Assignment 5 and Proofs

Homework: Not due

1. Section 4.1: 2, 10, 16
2. Section 4.2: 1, 2, 3, 5, 6, 9, 12, 15

Proofs: Due Monday, October 16

1. 4.2: 16, 17, 23.

2. Let $\odot O$ be a circle with tangent line $t$ at point $A$. Prove that if $B, C \in \odot O$, but $B, C \neq A$, then $B$ and $C$ are on the same side of $t$.

3. For each $x \in \odot O$, define $H_x = H(O, t_x)$, where $t_x$ is the tangent line to $\odot O$ passing through $x$. Prove that $\text{Int} \odot O = \bigcap_{x \in \odot O} H_x$. 