

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 $\text{Int}\odot O = \bigcap_{x \in \odot O} H_x$.