WS – Geometric Proof 1



1. Given: $m∠ABC = m∠CBD$

Prove: $\vec{BC} $is the angle bisector of $∠ABD$



1. Given: $∠ABC$ is a right angle

Prove: $∠1$ and $∠$2 are complementary



1. Given: $m∠1=90°$

Prove: $m∠2=90°$



1. Given: $AB = BC, BC = BD$

Prove: $B$ is the midpoint of $AD$

1. Given: $m∠5=47°$

Prove: $m∠6=133°$

1. Given: $\overbar{CD} ≅ \overbar{EF}, \overbar{CD} ≅ \overbar{FG}$

Prove: $F$ is the midpoint of $\overbar{EG}$



1. Given: $\overbar{AD} bisects ∠BAC, ∠1≅ ∠3$

Prove: $∠2≅∠3$



1. Given: $\overbar{EF} ⊥ \overbar{EG}$, $D$ is in the interior of $∠FEG$

Prove: $∠FED and ∠DEG $are complementary