Name _____
Due Date _____
Block _____

Practice Intro to Proof Test #1.1

★ = Basic ★★ = Medium ★★★ = Difficult

★ ① Given: $AB = CD$
Prove: $AB + GH = CD + GH$

★ ② Given: $m\angle ABC = m\angle DEF$
$\angle ABC \cong \angle DEF \cong \angle GHI$
Prove: $\angle GHI \cong \angle DEF$

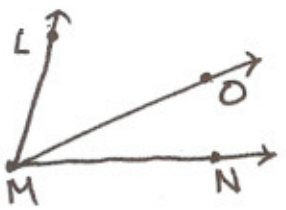
★★ ③ Given: $\overline{AB} \cong \overline{CD}$
$\overline{CD} \cong \overline{EF}$
$\overline{EF} \cong \overline{GH}$
Prove: $\overline{GH} \cong \overline{AB}$

★★ ④ Given: $LM = NO$
$GH = PO$
Prove: $LM = \frac{NO}{PO} \cdot GH$

★★ ⑤

Given: $DO = 7$
$OG = 3$
Prove: $DG = 10$

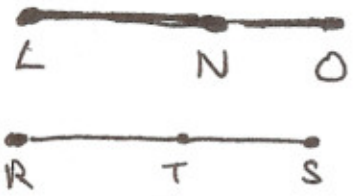
★★ ⑥



Given: $m\angle OMN = 240$
$m\angle LMN = 68°$
Prove: $m\angle LMO = 44°$

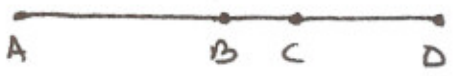
★★ ⑦ Given: $AB + CD = EF$
Prove: $AB = EF - CD$

★★★ ⑧



Given: $\overline{LN} \cong \overline{RT}$
$\overline{NO} \cong \overline{TS}$
Prove: $\overline{LO} \cong \overline{RS}$

★★★ ⑨



Given: $AB = CD$
Prove: $AC = BD$

★★ ⑩ Given: $ON = PR$
$LM = TQ$
Prove: $\frac{ON - TQ}{PR} = \frac{PR - LM}{ON}$

★★★ ⑪ ~~Given:~~

Given: $BC = 4$
$AB = 2 \cdot BC$
Prove: $AC = 12$