

Geometry

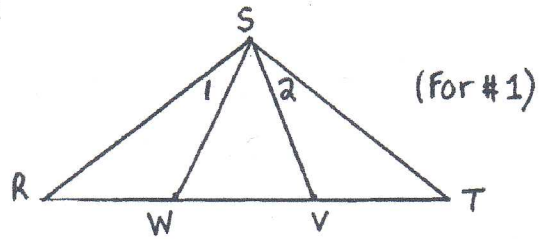
4-4, 4-5, 4-7 proofs

Handout 4C

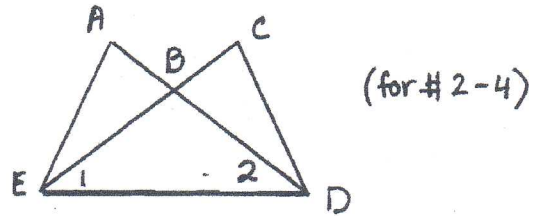
**Copy given, prove, and figure for each proof.

Name _____

1. Given: $\overline{RS} \cong \overline{TS}$, $\overline{RW} \cong \overline{TV}$
 Prove: $\angle 1 \cong \angle 2$



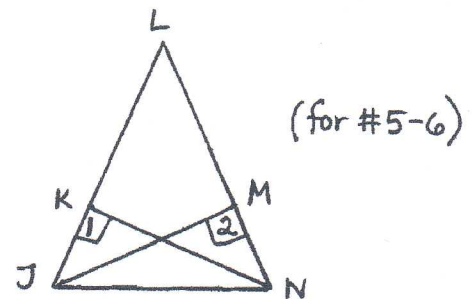
2. Given: $\overline{AE} \cong \overline{CD}$, $\overline{AD} \cong \overline{CE}$
 Prove: $\angle A \cong \angle C$



3. Given: $\angle AED \cong \angle CDE$, $\angle 1 \cong \angle 2$
 Prove: $\overline{AE} \cong \overline{CD}$

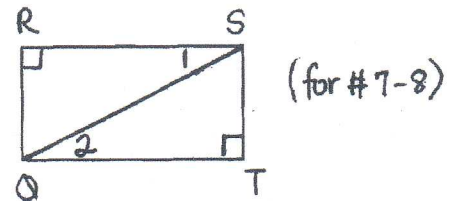
4. Given: $\overline{AE} \cong \overline{CD}$, $\angle AED \cong \angle CDE$
 Prove: $\angle 1 \cong \angle 2$

5. Given: $\angle KJN \cong \angle MNJ$, $\overline{JK} \perp \overline{KN}$, $\overline{NM} \perp \overline{MJ}$
 Prove: $\overline{KN} \cong \overline{MJ}$

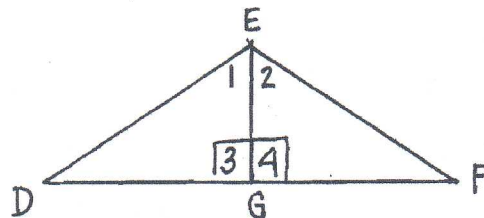


6. Given: $\overline{KN} \cong \overline{MJ}$, $\angle 1$ and $\angle 2$ are right \angle s
 Prove: $\overline{KJ} \cong \overline{MN}$

7. Given: $\angle R$ and $\angle T$ are right \angle s, $\overline{RQ} \cong \overline{TS}$
 Prove: $\angle 1 \cong \angle 2$

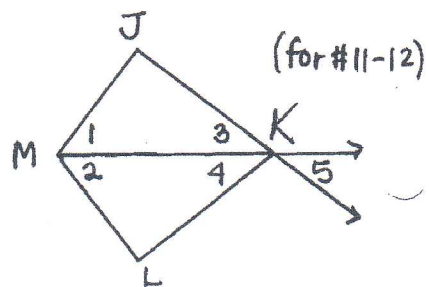


9. Given: $\overline{EG} \perp \overline{DF}$, $\overline{DE} \cong \overline{FE}$
 Prove: $\angle 1 \cong \angle 2$



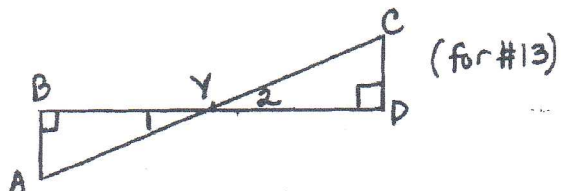
10. Given: $\overline{EG} \perp \overline{DF}$, G is the midpoint of \overline{DF}
 Prove: $\triangle DEF$ is isosceles

11. Given: $\angle J \cong \angle L$, \overline{KM} bisects $\angle JML$
 Prove: $\angle 4 \cong \angle 5$

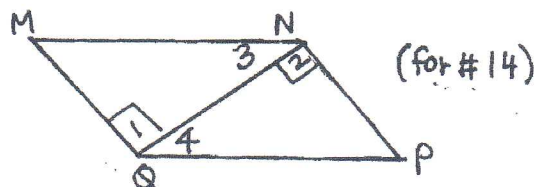


12. Given: $\angle J$ and $\angle L$ are right \angle s, $\overline{JM} \cong \overline{LM}$
 Prove: \overline{KM} bisects $\angle JKL$

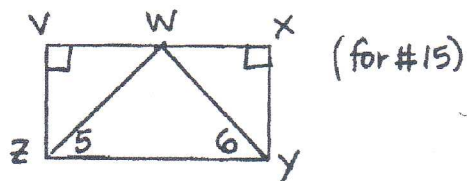
13. Given: $\overline{AB} \perp \overline{BY}$, $\overline{CD} \perp \overline{DY}$, \overline{AC} bisects \overline{BD}
 Prove: $\overline{AB} \cong \overline{CD}$



14. Given: $\angle 1$ and $\angle 2$ are right \angle s, $\overline{MN} \cong \overline{PQ}$
 Prove: $\overline{MN} \parallel \overline{QP}$



15. Given: $\overline{ZV} \perp \overline{VX}$, $\overline{YX} \perp \overline{XV}$, W is the midpoint of \overline{VX} ,
 $\angle 5 \cong \angle 6$
 Prove: $\triangle ZVW \cong \triangle YXW$



16. Given: \overline{GJ} is the perpendicular bisector of \overline{FH}
 Prove: $\triangle FGJ \cong \triangle HGJ$

