Geometry R	Name	
WS 4.8 Using 2 pairs of Triangles	Date	Period
EXERCISES		
<i>C C C C</i>	F	F'_
$\bigwedge  \bigwedge$		
		$\sum \sum$
A D B A' D' B' Ex. 1	D	G E D' G' E' Ex. 2
<b>1.</b> Given: $\triangle ABC \cong \triangle A'B'C', \overline{CD}$ bisects $\angle C, \overline{C}$ Prove: $\overline{CD} \cong \overline{C'D'}$ .		
<b>2.</b> Given: $\triangle DEF \cong \triangle D'E'F'$ , $\overline{FG}$ and $\overline{F'G'}$ are	medians.	
Prove: $\overline{FG} \cong \overline{F'G'}$ .		D F C
<b>3.</b> Given: $\overline{AEC}$ , $\overline{BED}$ , and $\overline{GEF}$ ; $\overline{AE} \cong \overline{CE}$ , $\overline{FE} \cong$	GF	
<b>5.</b> Given: AEC, BED, and GEF, AE = CE, TE = <i>Prove:</i> <b>a.</b> $\triangle FEC \cong \triangle GEA.$	OL.	E
<b>b.</b> $\angle C \cong \angle A$ .	Α	
<b>c.</b> $\triangle DEC \cong \triangle BEA.$		Ex. 3
<b>4.</b> Given: $\overline{AC}$ and $\overline{BD}$ bisect each other at G; $\overline{EGF}$ .	DE	С 7
<i>Prove:</i> <b>a.</b> $\triangle DGC \cong \triangle BGA$ . <b>b.</b> $\angle D \cong \angle B$ .	G	
<b>c.</b> $\overline{GE} \cong \overline{GF}$ .	$\leq$	$\sum D E C$
5. Given: $\overline{AD} \cong \overline{CB}, \overline{DC} \cong \overline{BA}, \overline{EF}$ bisects $\overline{BD}$ at G	F. A F Ex. 4	BG
<i>Prove</i> : <b>a.</b> $\triangle ADB \cong \triangle CBD$ .		
<b>b.</b> $\angle ABD \cong \angle CDB$ . <b>c.</b> $\overline{FG} \cong \overline{EG}$ .		A F B Ex. 5
$C. \ FG = EG.$		
	B	
		$A \swarrow \gamma C$
$B \xrightarrow{E \mid 1}{2} A$	7	12
D $P$ $T$	Q Q	<b>*</b> Р
Ex. 6 Ex. 7	•	Ex. 8

- 6. Given:  $\overline{AC} \cong \overline{AD}, \overline{BC} \cong \overline{BD}, \overline{AB}$  intersects  $\overline{CD}$  at E. *Prove*:  $\angle 1 \cong \angle 2$ .
- 7. Given:  $\overline{RP} \cong \overline{RQ}, \overline{SP} \cong \overline{SQ}$ . *B. Given:*  $\overline{PQ}, \overline{PAB}, \overline{PCD}, \overline{AQD}, \text{ and } \overline{CQB}, \angle 1 \cong \angle 2, \overline{AP} \cong \overline{CP}$ . *Prove:*  $\overline{RT}$  bisects  $\overline{PQ}$ . *Prove:*  $\overline{QB} \cong \overline{QD}$ .