

Review # 2

Review of Proofs for Cumulative Exam

Complete any 9 of the proofs in flow proof form. This is worth 3 points.

To receive 3 points, your work must be:

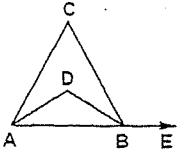
- thorough
- neat
- legible
- complete
- done on looseleaf with each page containing no more than 2 proofs
- skip a line between each proof

Name _____

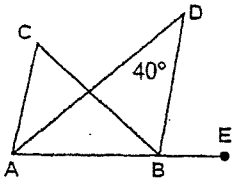
Due: day 2 of your cumulative exam

PROOFS REVIEW

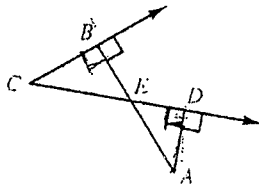
- a. **Given:** \overline{AD} bisects $\angle CAB$.
 \overline{BD} bisects $\angle CBA$.
 $m\angle CAB = m\angle CBA$
Prove: $\angle ADB \cong \angle CBE$



- b. \overline{AD} bisects $\angle CAB$.
 \overline{BD} bisects $\angle EBC$. $m\angle D = 40$
 Find $m\angle C$.

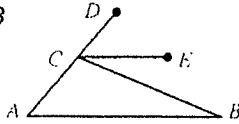


- c. **Given:** $\overline{AB} \perp \overline{BC}$, $\overline{AD} \perp \overline{CD}$
Prove: $\angle A \cong \angle C$



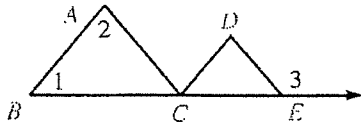
d. **Given:** \overline{CE} bisects $\angle BCD$. $\angle A \cong \angle B$

Prove: $\overline{CE} \parallel \overline{AB}$

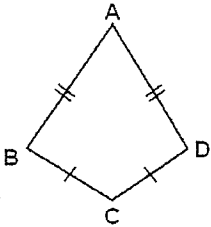


e. **Given:** $\overline{AC} \parallel \overline{DE}$

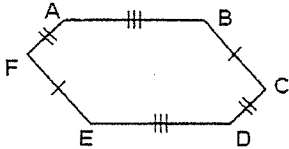
Prove: $m\angle 3 = m\angle 1 + m\angle 2$



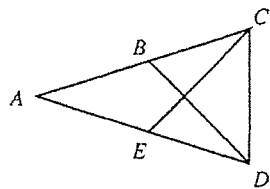
Prove that if $\overline{AD} \cong \overline{AB}$ and $\overline{CD} \cong \overline{CB}$, then $\angle D \cong \angle B$.



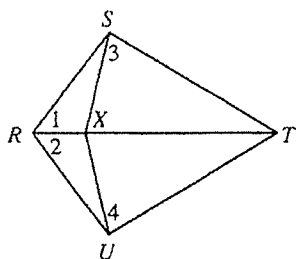
g. Prove that if $\overline{AB} \cong \overline{DE}$, $\overline{AF} \cong \overline{CD}$, $\overline{EF} \cong \overline{BC}$, and $\angle F \cong \angle C$, then $\overline{AB} \parallel \overline{ED}$.



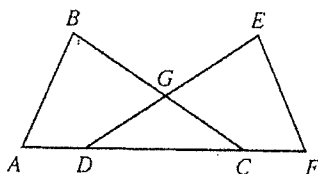
- h. **Given:** $\overline{BC} \cong \overline{ED}$
 $\angle ADC \cong \angle ACD$
Prove: $\overline{AB} \cong \overline{AE}$



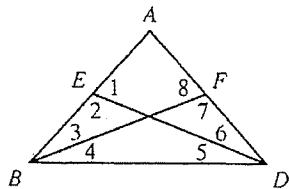
- i. **Given:** $\overline{RS} \cong \overline{RU}$, $\angle 1 \cong \angle 2$
Prove: $\angle 3 \cong \angle 4$



- j. **Given:** $\overline{AD} \cong \overline{FC}$, $\overline{AB} \cong \overline{FE}$
 $\angle A \cong \angle F$
Prove: $\triangle CDG$ is isosceles.

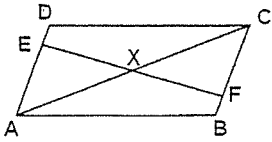


- k. $\angle ABD \cong \angle ADB$, \overline{BF} and \overline{DE} bisect $\angle ABD$ and $\angle ADB$ respectively. Prove that $\angle 1 \cong \angle 8$.



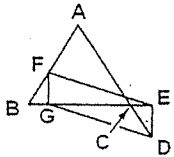
l. Given: $\square ABCD$, $\overline{DE} \cong \overline{FB}$

Prove: X bisects \overline{EF} .



m. Given: $EFGD$ is a \square . $\overline{ED} \perp \overline{BE}$, $\overline{BF} \cong \overline{CD}$

Prove: $\triangle ABC$ is isosceles.

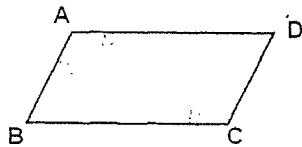


n. Prove the Theorem:

Given: $\angle A \cong \angle C$

$\angle B \cong \angle D$

Prove: $ABCD$ is a \square .



o. Given: $ABCD$ is a \square .

$AE = CF$

Prove: $BFDE$ is a \square .

