☐ **DO NOW – Geometry Local1 Lomac 2014-2015** **Date** ____. **due** ____. **Congruence** | **4.4L**

(DN)Copy and complete the statement:
In lesson 4.1L, SAS stood for _____. What will these abbreviations stand for?

ASA _____ SSA _____
SSS _____ AAA _____
AAS _____
HL _____ (this one is a challenge)

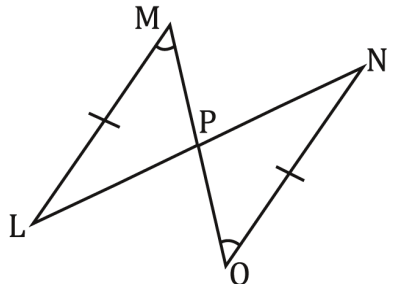
Name _____**Per**_____

LO: I can use triangle congruence shortcuts (SAS, SSS, ASA, AAS, and HL) to prove that two triangles are congruent.

☐ (1) **Proving pairs of congruent triangles**

☐ **(a)** Given: $\overline{LM} \cong \overline{NO}$, and $\angle M \cong \angle O$

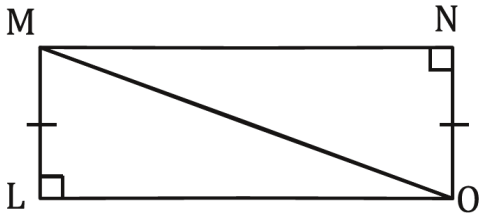
Prove: $\triangle MPL \cong \triangle NPO$



I know that . . .	because . . .

☐ **(b)** Given: $\overline{LM} \cong \overline{NO}$

Prove: $\triangle LMO \cong \triangle NOM$

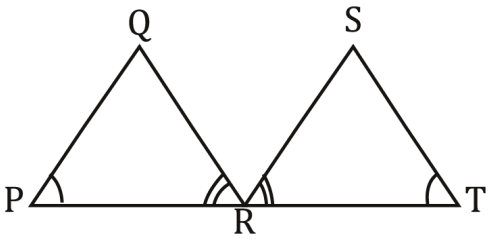


I know that . . .	because . . .

☐ (1) **Proving pairs of congruent triangles**

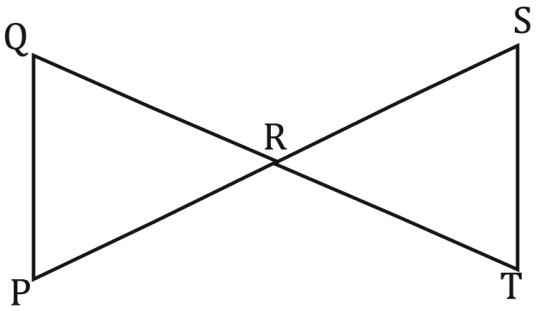
☐ **(c)** Given: R is the midpoint of $\overline{PT}$, $\angle P \cong \angle T$, a
$\angle PRQ \cong \angle TRS$

Prove: $\triangle PQR \cong \triangle TSR$



I know that . . .	because . . .

☐ **(d)** Given: $\overline{QT}$ bisects $\overline{SP}$, $\overline{SP}$ bisects $\overline{QT}$
Prove: $\triangle QRP \cong \triangle SRT$

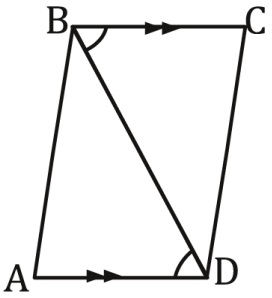


I know that . . .	because . . .

☐ (1) **Proving pairs of congruent triangles**

☐ **(e)** Given: $\overline{BA} \parallel \overline{CD}$ $\angle ADB \cong \angle CBD$

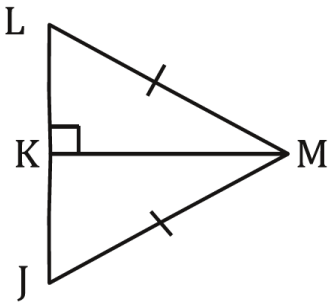
Prove: $\triangle ABD \cong \triangle CDB$



I know that . . .	because . . .

☐ **(f)** Given: $\overline{LM} \cong \overline{JM}$ $\overline{MK} \perp \overline{LJ}$

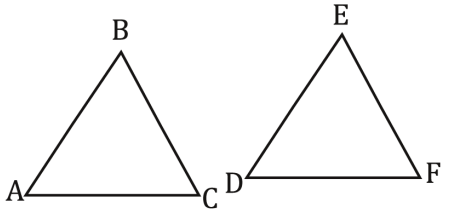
Prove: $\triangle LKM \cong \triangle JKM$



I know that . . .	because . . .

☐ (2) **Exit Ticket**

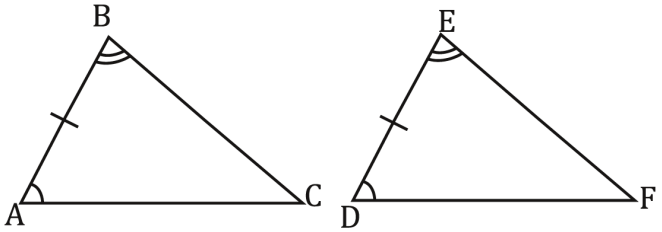
☐ Given: $\overline{BC} \cong \overline{EF}$, $\angle B \cong \angle E$, and $\angle C \cong \angle F$



Prove: $\triangle ABC \cong \triangle DEF$

☐ (3) **Homework**

(1) Given: $\overline{AB} \cong \overline{DE}$, $\angle B \cong \angle E$, and $\angle A \cong \angle D$



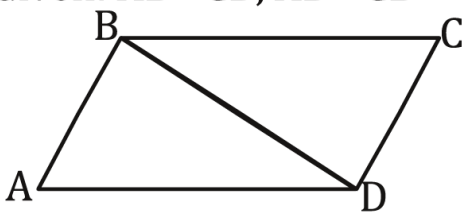
Prove: $\triangle ABC \cong \triangle DBC$

I know that . . .	because . . .

☐ (3) **Homework**

(2)

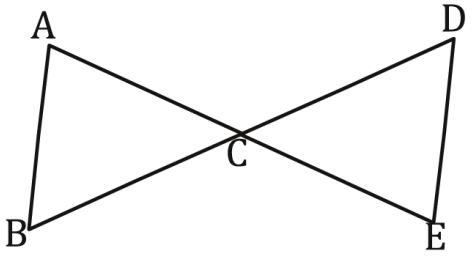
Given: $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{CB}$



Prove: $\triangle ABD \cong \triangle BCD$

I know that . . .	because . . .

(3) Given: $\overline{AE}$ Bisects $\overline{BD}$, $\angle B \cong \angle D$



Prove: $\triangle ABC \cong \triangle DBC$

I know that . . .	because . . .