

SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

😊😊😊😊 Today is a GREAT day to think mathematically! Let's get organized first. 😊😊😊😊

TABLE OF CONTENTS: **12/10 Proof Posters**

NEW NOTEBOOK PAGE: **12/10 Proof Posters – Name**

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Assignment Sheet: **12/10 CW: Proof Posters due 12/10**
12/10 HW: Congruent triangles flashcards due 12/11

DO NOW SHEET: **Name, Date, Period, draw a diagram for each:**
1) B is the midpoint of segment LJ
2) Ray TV bisects angle PTR
3) Segment AC is congruent to segment ES

LESSON: (Record all work in your notebook.)



Notes (Copy into your notebook and draw a box around them)

NO NOTES TODAY. INSTEAD . . . Use your notes to

- 1) Make a proof poster draft.**
- 2) Edit another students draft**
- 3) Make a final draft of your proof poster using the edits suggested by others.**

SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

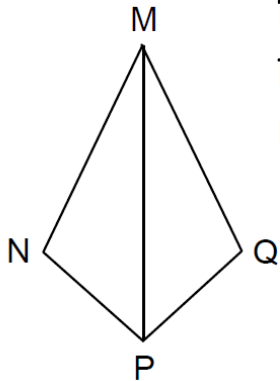
Proof Poster Activity

You will make a poster of a proof on 11x14 paper. On the poster, you should include...

- the diagram
- the given information
- what you are trying to prove
- a flowchart proof with statements and reasons that show why the triangles are congruent

Feel free to be creative and add color! However, the most important thing is that your proof is complete and correct!

#3



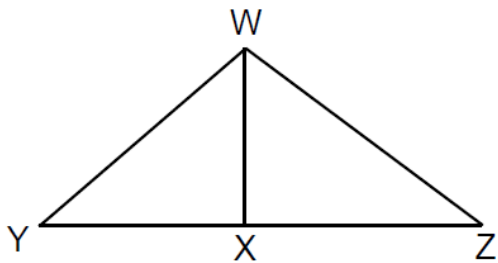
Given:

\overline{PM} bisects $\angle NPQ$;

$\overline{NP} \cong \overline{QP}$

Prove: $\triangle MPN \cong \triangle MPQ$

#5



Given: $\overline{WX} \perp \overline{YZ}$;

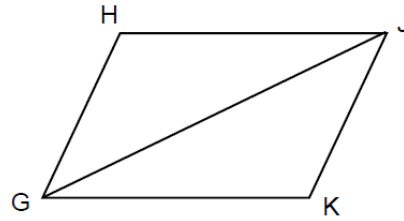
$\overline{WY} \cong \overline{WZ}$

Prove: $\triangle WXY \cong \triangle WXZ$

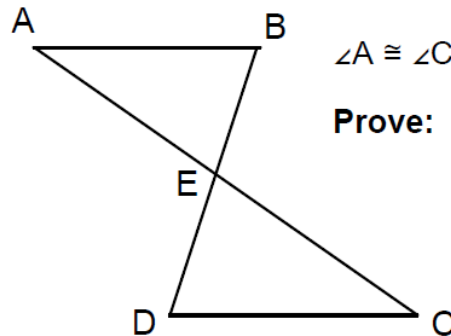
Given: $\overline{HJ} \parallel \overline{GK}$; $\overline{HJ} \cong \overline{GK}$

#1

Prove: $\triangle GHJ \cong \triangle JKG$



#2



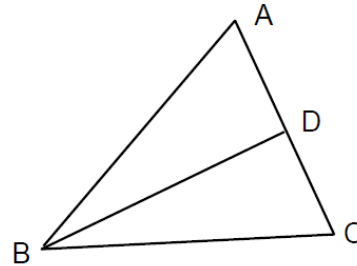
Given:

E is the midpoint of \overline{BD} ;

$\angle A \cong \angle C$

Prove: $\triangle ABE \cong \triangle CDE$

#4

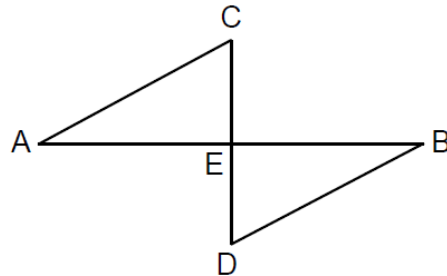


Given: $\overline{AB} \cong \overline{CB}$;

D is the midpoint of \overline{AC}

Prove: $\triangle ABD \cong \triangle CBD$

#6



Given: \overline{AB} is the perpendicular bisector of \overline{CD} ;

$\angle C \cong \angle D$

Prove: $\triangle ACE \cong \triangle BDE$