

Sec. 1.6 Proof Problems Due 3-25-20 (You are NOT turning this document into me!!)

In order to complete this document and get credit for it, you need to do the following:

- Go to “file”
- “Make a copy”
- Title this document with your full name and class period.
- Only share me on this document. If anyone else is shared, you will not receive any credit.

Completely type your responses in the two-column proof provided. Make sure you end each proof correctly.

Example of how to complete the first couple of problems on this document

Circle one of the following: SSS SAS **ASA** AAS HL Not Enough Information

Congruence Statement if necessary: $\triangle EDC \cong \triangle LID$

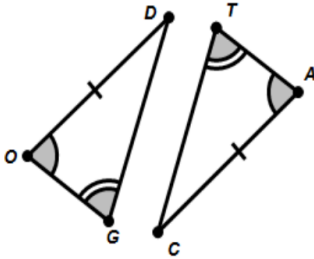
Circle one of the following: SSS **SAS** ASA AAS HL Not Enough Information

Congruence Statement if necessary: $\triangle REM \cong \triangle ATF$

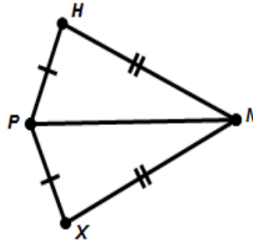
Circle one of the following: SSS SAS ASA AAS HL **Not Enough Information**

Congruence Statement if necessary:

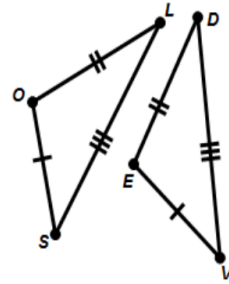
1. Tell which of the following triangle provide enough information to show that they must be congruent. If they are congruent, state which theorem suggests they are congruent (SAS, ASA, SSS, AAS, HL) and write a congruence statement.



Circle one of the following:
 SSS SAS ASA AAS HL Not Enough Information
 Congruence Statement if necessary:



Circle one of the following:
 SSS SAS ASA AAS HL Not Enough Information
 Congruence Statement if necessary:

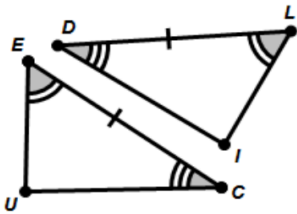


Circle one of the following:
 SSS SAS ASA AAS HL Not Enough Information
 Congruence Statement if necessary:

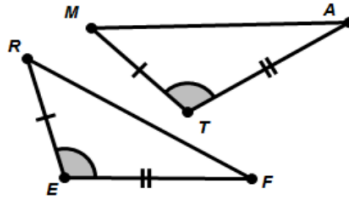
1A) Congruence Statement if necessary:

1B) Congruence Statement if necessary:

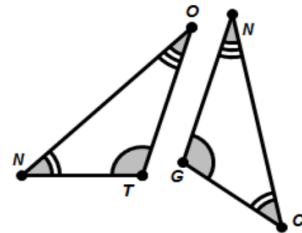
1C) Congruence Statement if necessary:



Circle one of the following:
 SSS SAS ASA AAS HL Not Enough Information
 Congruence Statement if necessary:



Circle one of the following:
 SSS SAS ASA AAS HL Not Enough Information
 Congruence Statement if necessary:



Circle one of the following:
 SSS SAS ASA AAS HL Not Enough Information
 Congruence Statement if necessary:

1D) Congruence Statement if necessary:

1E) Congruence Statement if necessary:

1F) Congruence Statement if necessary:

Circle one of the following: **SSS SAS ASA AAS HL** Not Enough Information

Congruence Statement if necessary:

Circle one of the following: **SSS SAS ASA AAS HL** Not Enough Information

Congruence Statement if necessary:

Circle one of the following: **SSS SAS ASA AAS HL** Not Enough Information

Congruence Statement if necessary:

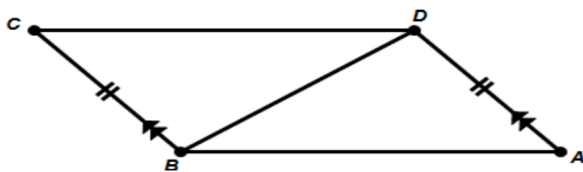
1G) Congruence Statement if necessary:

1H) Congruence Statement if necessary:

1J) Congruence Statement if necessary:

2. Prove which of the following triangles congruent if possible by filling in the missing blanks:

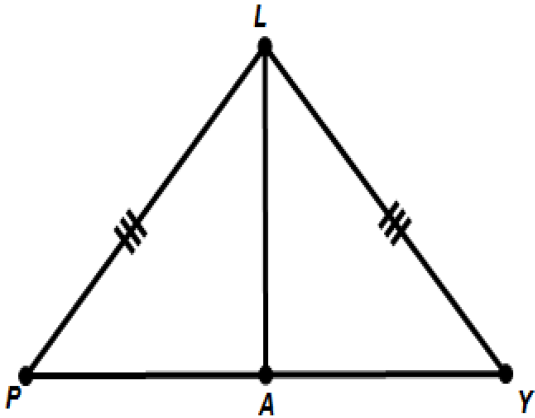
a. Given $\overline{CB} \cong \overline{AD}$ and $\overline{CB} \parallel \overline{AD}$



Statements	Reasons
1. $\overline{CB} \cong \overline{AD}$	
2. $\overline{CB} \parallel \overline{AD}$	
3. $\angle CBD \cong \angle ADB$	
4. $\overline{BD} \cong \overline{BD}$	
5. $\triangle BCD \cong \triangle DAB$	

Statement	Reason

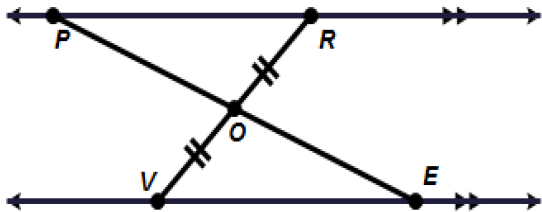
b. Given $\overline{PL} \cong \overline{YL}$ and Point A is the midpoint of \overline{PY}



Statements	Reasons
1.	Given
2.	Given
3.	Definition of Midpoint
4.	Reflexive property of congruence
5.	By steps 1,3,4 and SSS

Statement	Reason

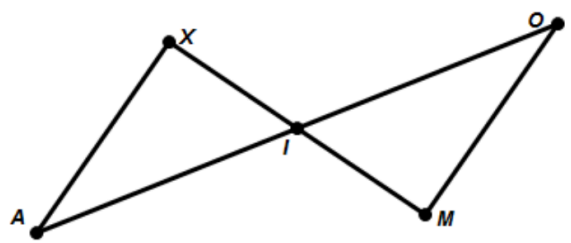
c. Given $\overline{VO} \cong \overline{RO}$ and $\overrightarrow{PR} \parallel \overrightarrow{VE}$



Statements	Reasons
1.	Given
2.	Given
3.	
4.	
5. $\triangle PRO \cong \triangle EVO$	

Statement	Reason

e. Given point I is the midpoint of \overline{XM} and point I is the midpoint of \overline{AO}

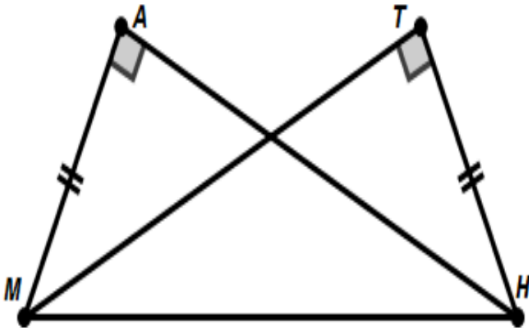


Statements	Reasons
1. I is the midpoint of \overline{XM}	
2.	Definition of Midpoint
3. I is the midpoint of \overline{AO}	
4.	
5. $\angle AIX \cong \angle OIM$	
6. $\triangle AXI \cong \triangle OMI$	

Statement

Reason

f. Given $\angle MAH$ and $\angle HTM$ are right angles
and $\overline{MA} \cong \overline{TH}$



Statements	Reasons
1. $\angle MAH$ & $\angle HTM$ are right angles	
2. $\overline{MA} \cong \overline{TH}$	
3. $\overline{MH} \cong \overline{MH}$	
4. $\triangle MAH \cong \triangle HTM$	

Statement	Reason

