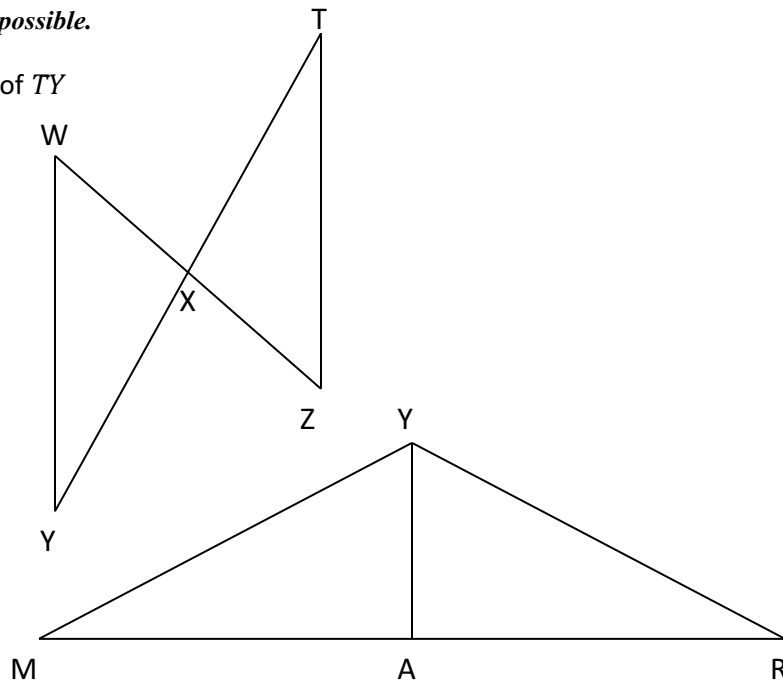


For questions 1 and 2, mark the given information provided for each question on the picture. Based on this information (you may also include information that is allowed to be assumed from the drawing), can you prove that the triangles are congruent? If so, indicate the correct congruence theorem. If you can't prove the triangles are congruent (the markings don't line up correctly or there is not enough information) mark *not possible*.

- 1) Given: $\angle XWY \cong \angle XZT$ and X is the midpoint of TY

- A ASA
B AAS
C SAS
D HL
E Not Possible



- 2) Given: $m\angle YAM = m\angle YAR = 90^\circ$, $MY \cong RY$

- A ASA
B AAS
C SAS
D HL
E Not Possible

For questions 3-6 complete the proof by supplying the missing information.

Given: AC is the angle bisector of $\angle DAB$; $AD \cong AB$

Prove: $\angle D \cong \angle B$

Statements	Reasons
1. AC is the angle bisector of $\angle DAB$ $AD \cong AB$	1. Given
2. Problem 3	2. Definition of an Angle Bisector
3. $AC \cong AC$	3. Problem 4
4. $\triangle ACD \cong \triangle ACB$	4. Problem 5
5. $\angle D \cong \angle B$	5. Problem 6

- 3) Which is the best choice for Statement 2 (problem 3) in the proof above?

- A) $\angle CDA \cong \angle CBA$ B) $\angle DAC \cong \angle ACB$ C) $\angle DAC \cong \angle DCA$
D) $\angle DAC \cong \angle BAC$ E) $\angle ABC \cong \angle ADC$

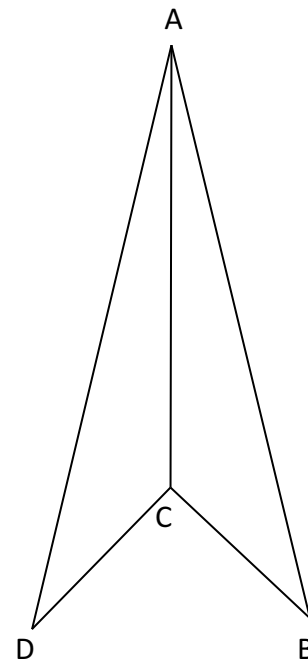
- 4) Which is the best choice for Reason 3 (problem 4) in the proof above?

- A) Definition of an angle bisector B) Definition of a Midpoint
C) Vertical Angle Theorem D) Reflexive Property E) CPCF (Same as CPCTC)

- 5) Which is the best choice for Reason 4 (problem 5) in the proof above?

- A) ASA B) SAS C) AAS D) HL E) SSS

- 6) Which is the best choice for Reason 5 (problem 6) in the proof above?



Geometry

Name _____

Congruence Theorems – Multiple Choice Practice

Date _____ Hour _____

A) Definition of an angle bisector

B) Definition of a Midpoint

C) Vertical Angle Theorem

D) Reflexive Property

E) CPCF (Same as CPCTC)