See ANSWERS below on PAGE 3.

1. <B ≅ <Y, <A ≅ <Z, BC ≅ YX

2. <C ≅ <X, A< ≅ <Z, CA ≅ XZ

3. AC ≅ ZX, <B ≅ <Y, BC ≅ YX

For the following you are given triangle DNA, triangle TMO, DN ≅ TM, and <D ≅ <T.

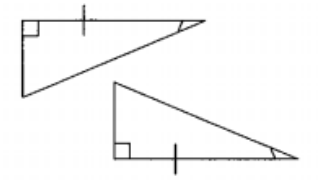
4. What additional information is needed for a SAS congruence correspondence?

5. What additional information is needed for a ASA congruence correspondence?

6. What additional information is needed for a AAS congruence correspondence?

Can the two triangles be proven congruent? If so, write the method. If not, write “none”.

7.



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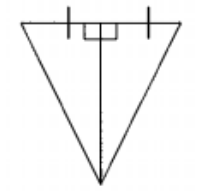

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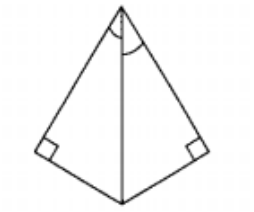

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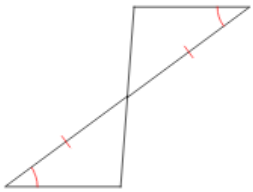

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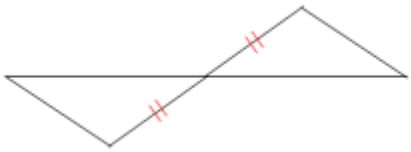
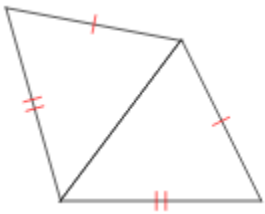


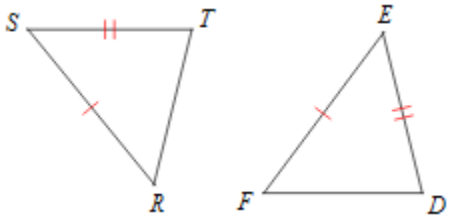
12.

13.

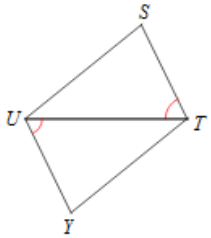


State what additional information is required in order to know that the triangles are congruent for the given reason.

14. SAS



15. AAS



Answers:

1. AAS

2. ASA

3. none

4. DA ≅ TO

SAS DA ≅ TO

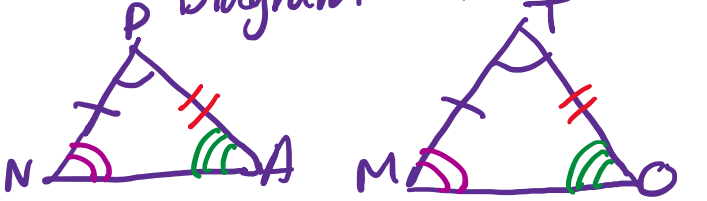
5. <N ≅ <M

ASA ∠N ≅ ∠M

6. <A ≅ <O

AAS ∠A ≅ ∠O

Diagram for #4-6



7. ASA

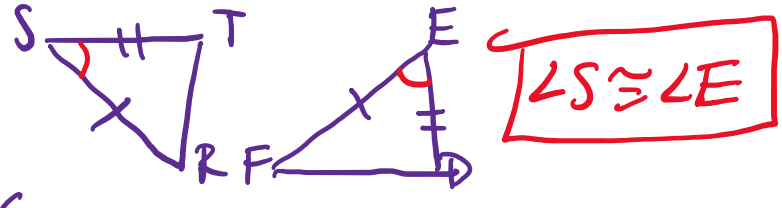
8. SAS
9. AAS

10. ASA

11. none
12. none

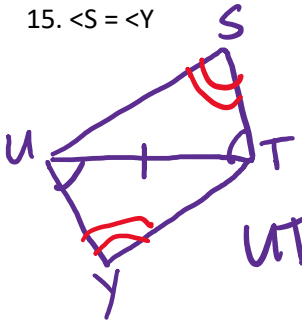
13. SSS

14. <S = <E



SAS ∠S ≅ ∠E

15. <S = <Y



AAS ∠S ≅ ∠Y

UT ≅ UT reflexive property