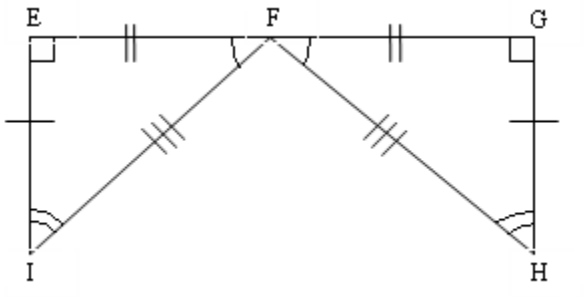
Classwork 2.3 Triangle Congruence

Name the congruent triangle and the congruent parts.



▲FGH ≅ _____

1. < EFI ≅

2. $\overline{FG}$ ≅ _____

3. < G ≅ _____

4. $\overline{GH}$ ≅ _____

5. < H ≅ _____

6. $\overline{FH}$ ≅ _____

Use the congruency statement to fill in the corresponding congruent parts.

▲EFI ≅ ▲HGI

7. < E ≅ _____

8. $\overline{FE}$ ≅ _____

9. < EFI ≅ _____

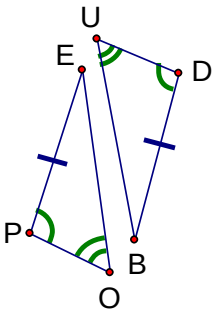
10. $\overline{FI}$ ≅ _____

11. < FIE ≅ _____

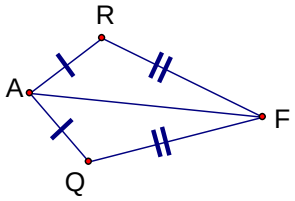
12. $\overline{IE}$ ≅ _____

State whether each pair of triangles is congruent by SSS, SAS, ASA, AAS, or HL; if none of these methods work, write N. If congruent, make a congruence statement for the triangles.

13.



14.



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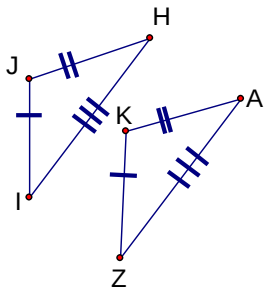
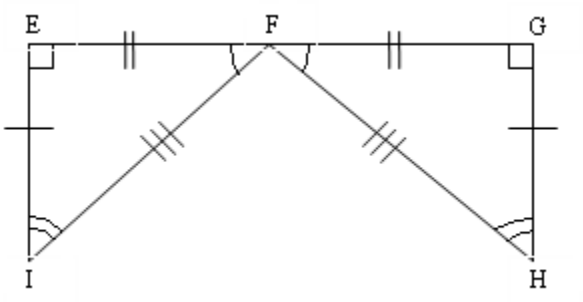


Classwork 2.3 Triangle Congruence **Solutions**

Name the congruent triangle and the congruent parts



▲FGH ≅ ▲FEI

1. < EFI ≅ < GFH
2. $\overline{FG} \cong \overline{FE}$
3. < G ≅ < E
4. $\overline{GH} \cong \overline{EI}$
5. < H ≅ < I
6. $\overline{FH} \cong \overline{FI}$

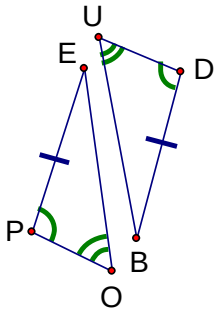
Use the congruency statement to fill in the corresponding congruent parts.

▲EFI ≅ ▲HGI

7. < E ≅ < H
8. $\overline{FE} \cong \overline{GH}$
9. < EFI ≅ <HGI
10. $\overline{FI} \cong \overline{GI}$
11. < FIE ≅ < GIH
12. $\overline{IE} \cong \overline{IH}$

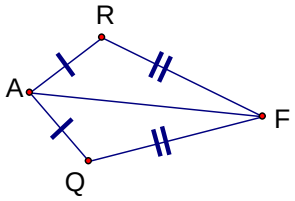
State whether each pair of triangles is congruent by SSS, SAS, ASA, AAS, or HL; if none of these methods work, write N. If congruent, make a congruence statement for the triangles.

13.



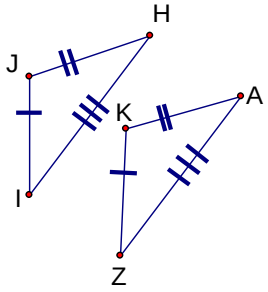
AAS

14.



SSS

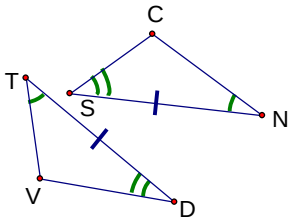
15.



SSS

Classwork 2.3 Triangle Congruence (Page 2)

16.



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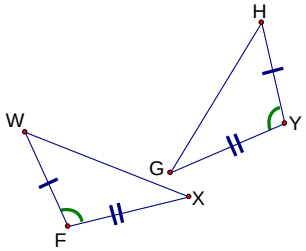

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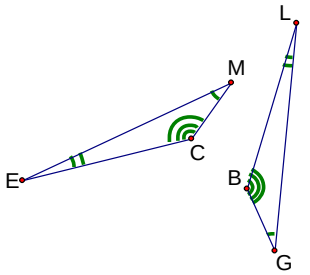

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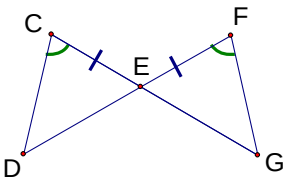

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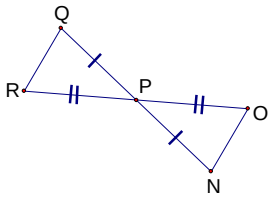

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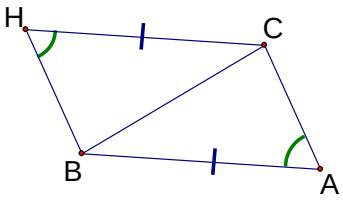

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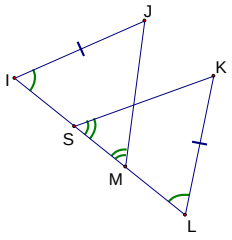

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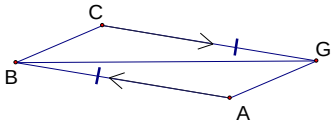

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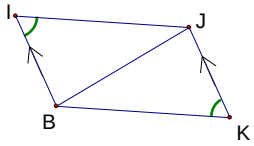
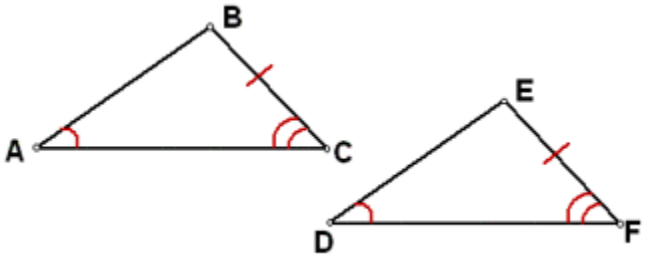
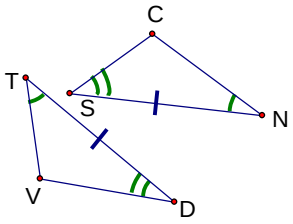


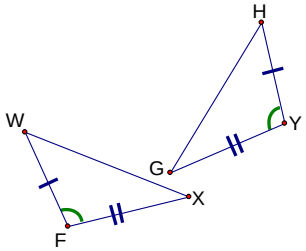
25. Which of the statements about the two triangles is correct?

A) The triangles are congruent by AAA.
B) These triangles are congruent by AAS.
C) These triangles are congruent by SSS.
D) These triangles are congruent by SSA.

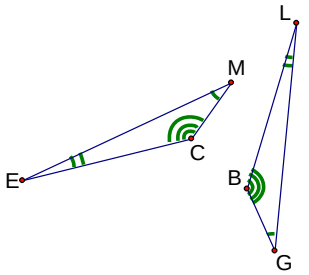


16. 

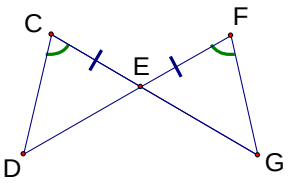
ASA

17. 

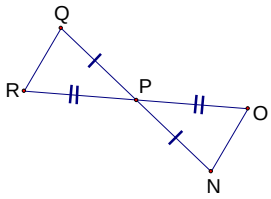
SAS

18. 

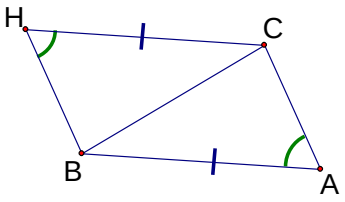
Not Congruent

19. 

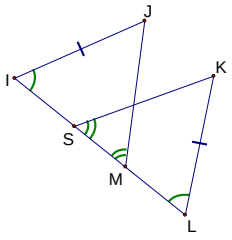
ASA

20. 

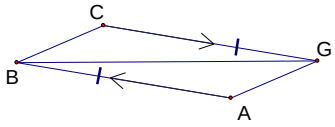
SAS

21. 

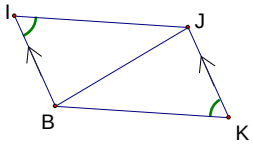
Not Congruent

22. 

SAS

23. 

ASA

24. 

AAS

25. Which of the statements about the two triangles is correct?

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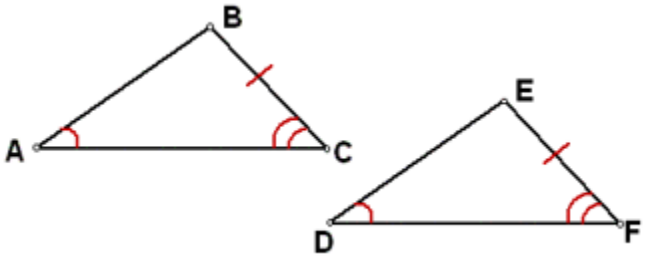
C) These triangles are congruent by SSS.
D) These triangles are congruent by SSA.



B