

Using the diagram below, determine the angle between the two sides.

1. \overline{QP} and \overline{PS}

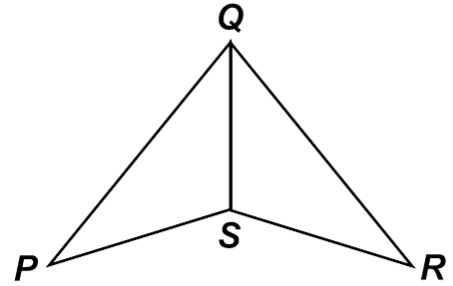
2. \overline{QS} and \overline{SR}

3. \overline{QR} and \overline{RS}

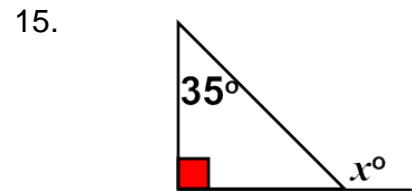
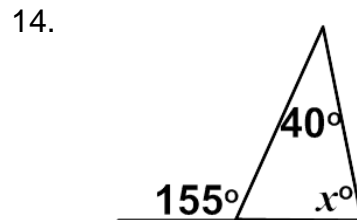
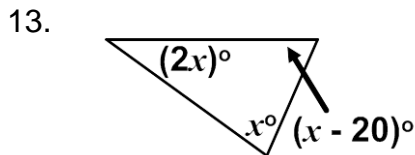
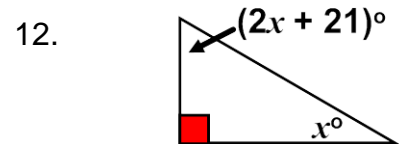
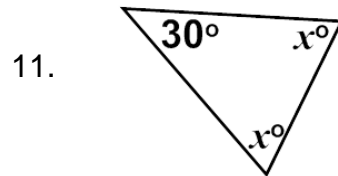
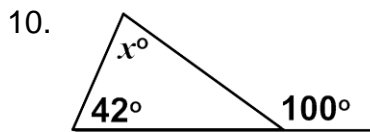
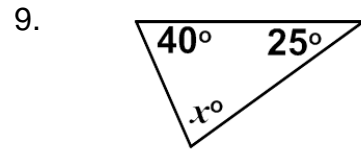
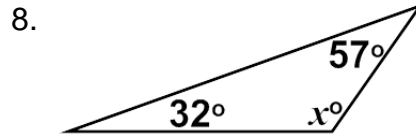
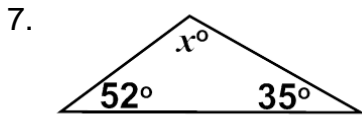
4. \overline{SQ} and \overline{QR}

5. \overline{PQ} and \overline{QS}

6. \overline{PS} and \overline{SQ}



Solve the value of x .



Given $\triangle NOW \cong \triangle ART$, determine the following.

16. $\overline{NO} \cong$ _____

17. $\overline{WN} \cong$ _____

18. $\overline{WO} \cong$ _____

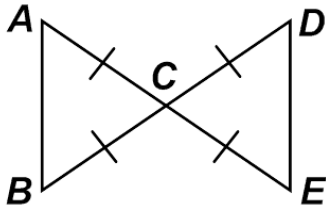
19. $\angle NWO \cong$ _____

20. $\angle WNO \cong$ _____

21. $\angle WON \cong$ _____

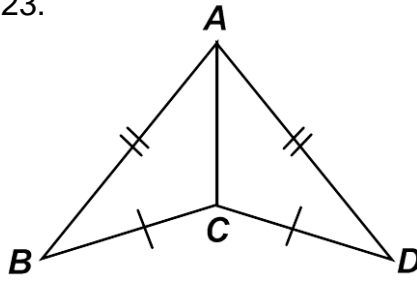
Determine whether the two triangles are congruent. If they are congruent, determine whether they are congruent by SSS or SAS.

22.



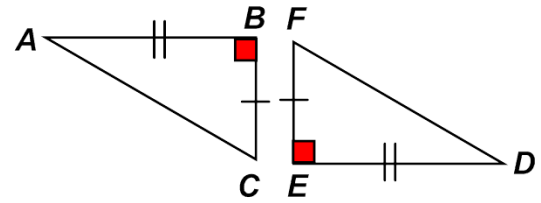
Congruent Δ : YES or NO
SSS or SAS

23.



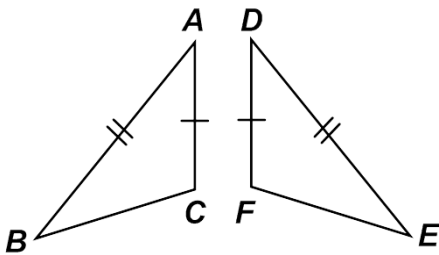
Congruent Δ : YES or NO
SSS or SAS

24.



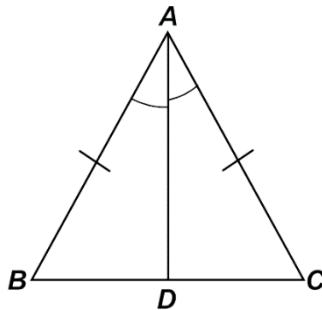
Congruent Δ : YES or NO
SSS or SAS

25.



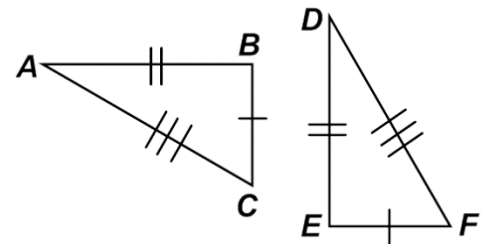
Congruent Δ : YES or NO
SSS or SAS

26.



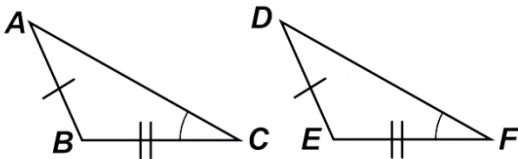
Congruent Δ : YES or NO
SSS or SAS

27.



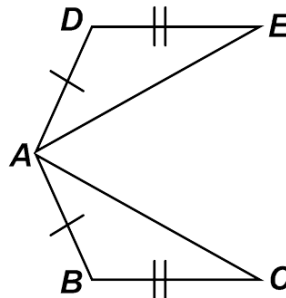
Congruent Δ : YES or NO
SSS or SAS

28.



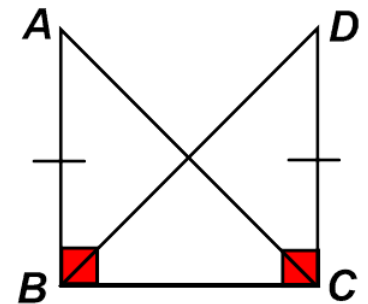
Congruent Δ : YES or NO
SSS or SAS

29.



Congruent Δ : YES or NO
SSS or SAS

30. $\Delta ABC \cong \Delta DCB$?

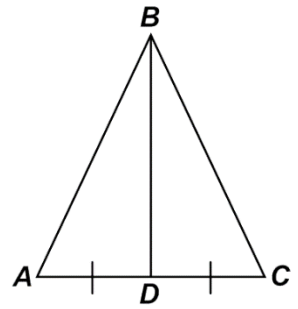


Congruent Δ : YES or NO
SSS or SAS

Prove.

31. Given: $\overline{AD} \cong \overline{CD}$
 $\triangle ABC$ is an isosceles triangle.

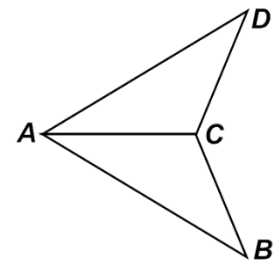
Prove: $\triangle ABD \cong \triangle CBD$



Statements	Reasons
1. $\overline{AD} \cong \overline{CD}$	1. _____
2. $\triangle ABC$ is an isosceles triangle.	2. Given
3. _____	3. Def. of an isosceles triangle.
4. $\overline{DB} \cong \overline{DB}$	4. _____
5. _____	5. _____

32. Given: $\overline{CD} \cong \overline{CB}$
 $\angle ACD \cong \angle ACB$

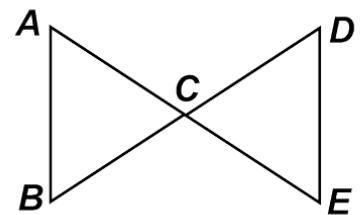
Prove: $\triangle ACD \cong \triangle ACB$



Statements	Reasons
1. _____	1. Given
2. _____	2. Given
3. _____	3. Reflexive Property of Congruence
4. _____	4. _____

33. Given: $\cdot C$ is the midpoint of \overline{AE}
 $\cdot C$ is the midpoint of \overline{BD}

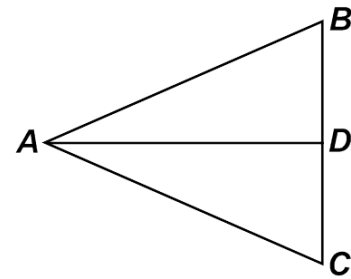
Prove: $\triangle ABC \cong \triangle EDC$



Statements	Reasons
1. _____	1. Given
2. _____	2. _____
3. _____	3. Given
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____

Prove.

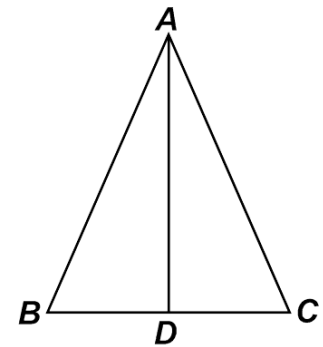
34. Given: $\triangle ABC$ is an isoscles triangle.
 $\cdot D$ is the midpoint of \overline{BC}



Prove: $\triangle ABD \cong \triangle ACD$

Statements		Reasons	
1.	$\triangle ABC$ is an isoscles triangle.	1.	Given
2.	_____	2.	_____
3.	$\cdot D$ is the midpoint of \overline{BC}	3.	Given
4.	_____	4.	_____
5.	_____	5.	_____
6.	_____	6.	_____

35. Given: $\overline{AD} \perp \overline{BC}$
 $\cdot D$ is the midpoint of \overline{BC}



Prove: $\triangle ABD \cong \triangle ACD$

Statements		Reasons	
1.	$\overline{AD} \perp \overline{BC}$	1.	Given
2.	$\angle ADB$ and $\angle ADC$ are right angles.	2.	_____
3.	_____	3.	All right angles are congruent.
4.	$\cdot D$ is the midpoint of \overline{BC}	4.	Given
5.	_____	5.	_____
6.	_____	6.	_____
7.	_____	7.	_____