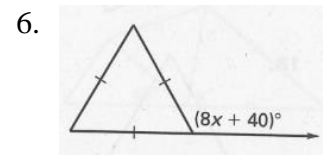
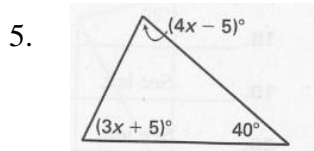
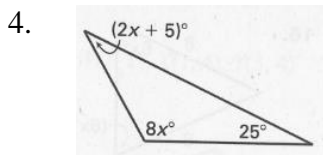
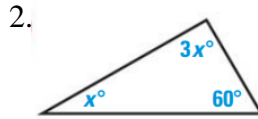
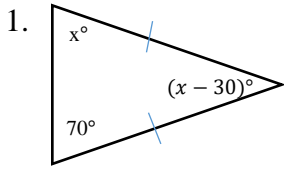
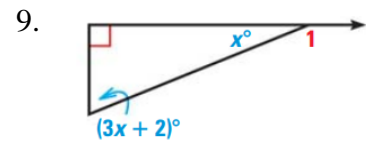
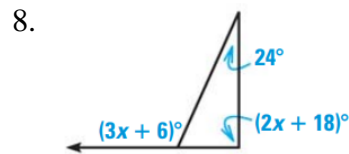
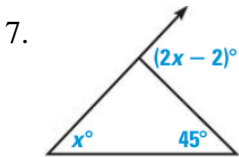


Find the value of x . Then classify the triangle by its angles and sides.



Find the measure of the exterior angle shown.



Find the measure of the numbered angle.

10. $m\angle 1$

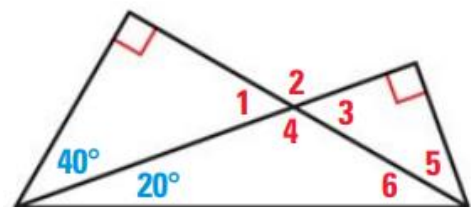
11. $m\angle 2$

12. $m\angle 3$

13. $m\angle 4$

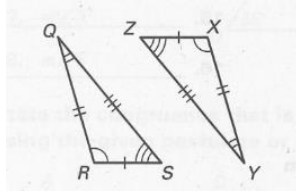
14. $m\angle 5$

15. $m\angle 6$

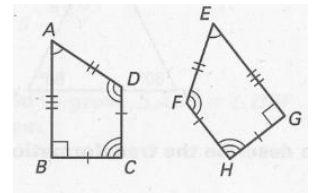


Complete the congruence statement.

16. $\triangle QRS \cong$ _____



17. $CBAD \cong$ _____



State the third congruence that must be given to prove that $\triangle ABC \cong \triangle DEF$.

18. **Given:** $\triangle ABC$ and $\triangle DEF$ are right triangles, $\overline{BC} \cong \overline{EF}$, _____ \cong _____

Use the HL Congruence Postulate

19. **Given:** $\overline{AB} \cong \overline{DE}$, $\overline{AC} \cong \overline{DF}$, _____ \cong _____

Use the SSS Congruence Postulate

20. **Given:** $\overline{AB} \cong \overline{DE}$, $\angle B \cong \angle E$, _____ \cong _____

Use the ASA Congruence Postulate

21. **Given:** $\overline{BC} \cong \overline{EF}$, $\angle B \cong \angle E$, _____ \cong _____

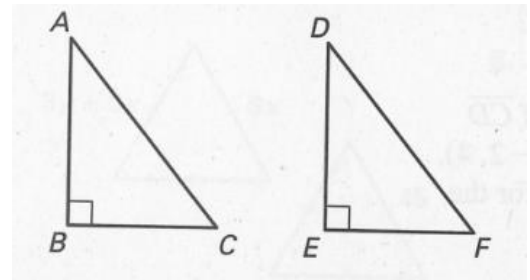
Use the SAS Congruence Postulate

22. **Given:** $\angle A \cong \angle D$, $\angle B \cong \angle E$, _____ \cong _____

Use the AAS Congruence Postulate

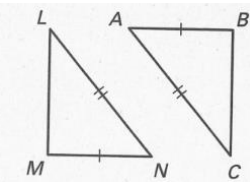
23. **Given:** $\angle A \cong \angle D$, $\angle C \cong \angle F$, _____ \cong _____

Use the ASA Congruence Postulate

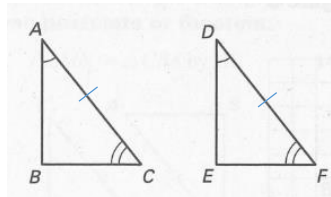


Decide whether enough information is given to prove that the triangles are congruent. If there is enough information, state a congruence statement AND the congruence postulate or theorem you would use.

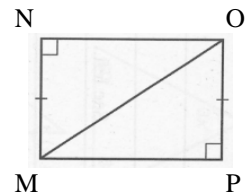
24.



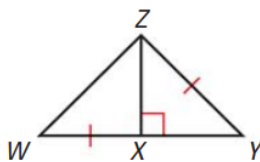
25.



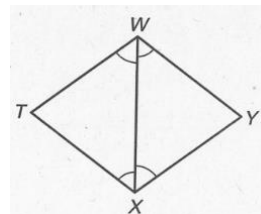
26.



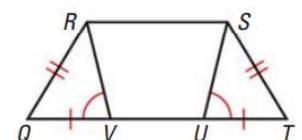
27.



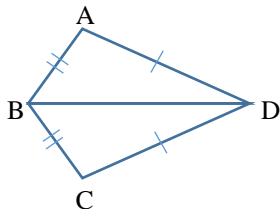
28.



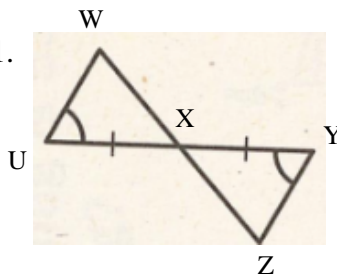
29.



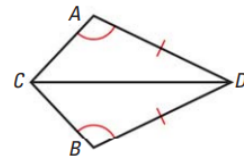
30.



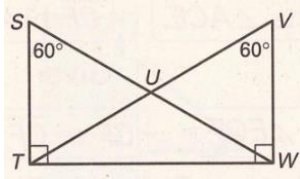
31.



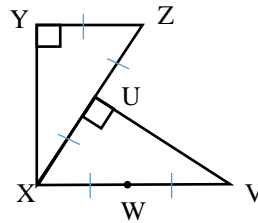
32.



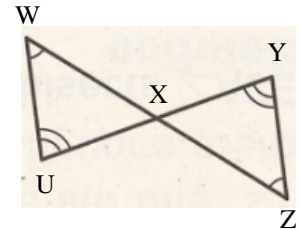
33.



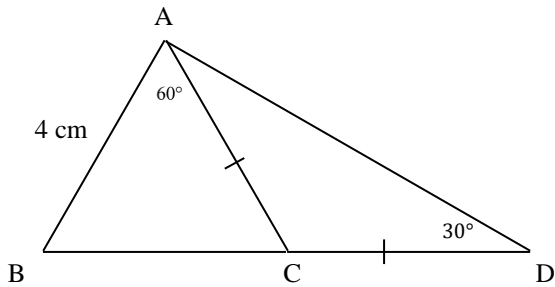
34.



35.



Determine the following measures (**Label your answers**)



36. $m\angle ABC =$ _____

37. $m\angle ACB =$ _____

38. $m\angle ACD =$ _____

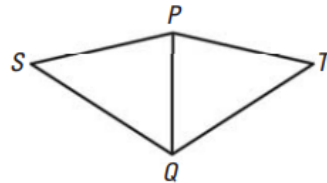
39. $m\angle DAC =$ _____

40. $BC =$ _____

41. $AC =$ _____

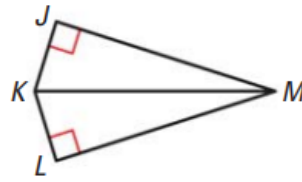
42. $CD =$ _____

43. **Given:** \overline{PQ} bisects $\angle SPT$, $\overline{SP} \cong \overline{TP}$
Prove: $\angle S \cong \angle T$



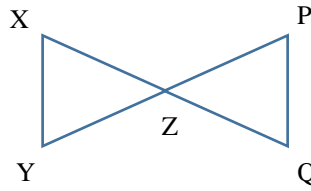
Statement	Reason
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____

44. **Given:** $\overline{JM} \cong \overline{LM}$, $\angle J$ and $\angle L$ are right angles
Prove: $\overline{JK} \cong \overline{LK}$



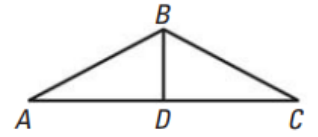
Statement	Reason
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____

45. **Given:** Z is the midpoint of \overline{PQ} , $\angle X \cong \angle Q$
Prove: $\angle Y \cong \angle P$



Statement	Reason
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____

46. **Given:** $\triangle ABC$ is an isosceles triangle with \overline{AC} as the base
 \overline{BD} bisects $\angle ABC$
Prove: $\overline{AD} \cong \overline{CD}$



Statement	Reason
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____