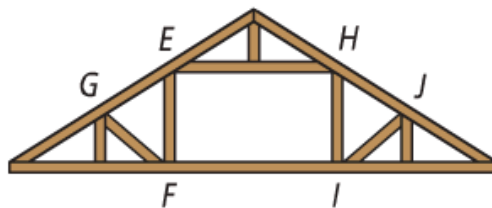
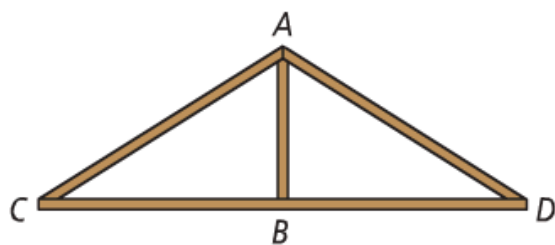


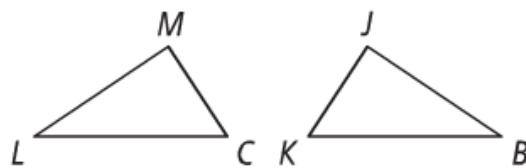
8. **Construction** Builders use the king post truss (below left) for the top of a simple structure. In this truss, $\triangle ABC \cong \triangle ABD$. List the congruent corresponding parts. ← See Problem 1.



9. The attic frame truss (above right) provides open space in the center for storage. In this truss, $\triangle EFG \cong \triangle HIJ$. List the congruent corresponding parts.

$\triangle LMC \cong \triangle BJK$. Complete the congruence statements.

- | | |
|--|--|
| 10. $\overline{LC} \cong \underline{\hspace{1cm}}$ | 11. $\overline{KJ} \cong \underline{\hspace{1cm}}$ |
| 12. $\overline{JB} \cong \underline{\hspace{1cm}}$ | 13. $\angle L \cong \underline{\hspace{1cm}}$ |
| 14. $\angle K \cong \underline{\hspace{1cm}}$ | 15. $\angle M \cong \underline{\hspace{1cm}}$ |
| 16. $\triangle CML \cong \underline{\hspace{1cm}}$ | 17. $\triangle KBJ \cong \underline{\hspace{1cm}}$ |
| 18. $\triangle MLC \cong \underline{\hspace{1cm}}$ | 19. $\triangle JKB \cong \underline{\hspace{1cm}}$ |

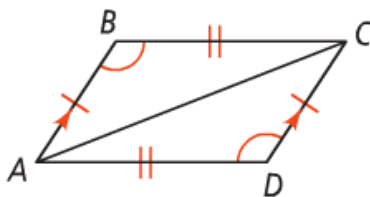


$POLY \cong SIDE$. List each of the following.

20. four pairs of congruent sides
21. four pairs of congruent angles

32. **Given:** $\overline{AB} \parallel \overline{DC}$, $\angle B \cong \angle D$,
Proof $\overline{AB} \cong \overline{DC}$, $\overline{BC} \cong \overline{AD}$

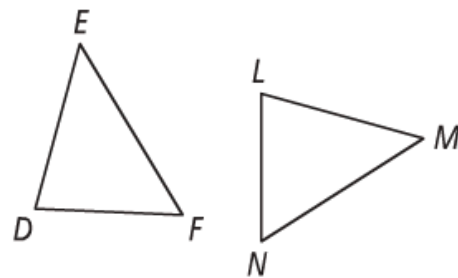
Prove: $\triangle ABC \cong \triangle CDA$



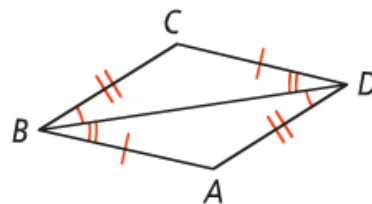
← See Problem 4.

33. If $\triangle DEF \cong \triangle LMN$, which of the following must be a correct congruence statement?

- | | |
|---|-------------------------------|
| (A) $\overline{DE} \cong \overline{LN}$ | (C) $\angle N \cong \angle F$ |
| (B) $\overline{FE} \cong \overline{NL}$ | (D) $\angle M \cong \angle F$ |



34. **Reasoning** Randall says he can use the information in the figure to prove $\triangle BCD \cong \triangle DAB$. Is he correct? Explain.



Algebra $\triangle ABC \cong \triangle DEF$. Find the measures of the given angles or the lengths of the given sides.

- | | |
|---|--|
| 35. $m\angle A = x + 10$, $m\angle D = 2x$ | 36. $m\angle B = 3y$, $m\angle E = 6y - 12$ |
| 37. $BC = 3z + 2$, $EF = z + 6$ | 38. $AC = 7a + 5$, $DF = 5a + 9$ |