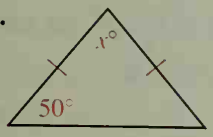
Written Exercises

Find the value of x.

A

1.



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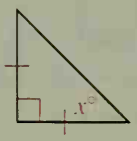

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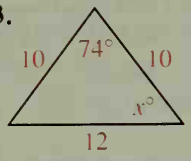

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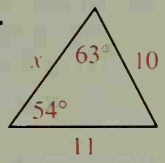

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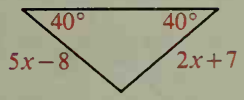

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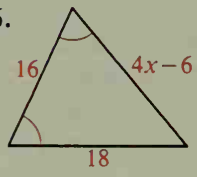

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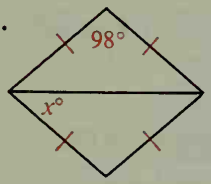

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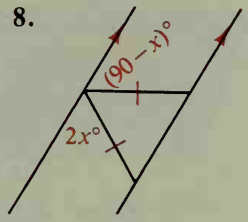
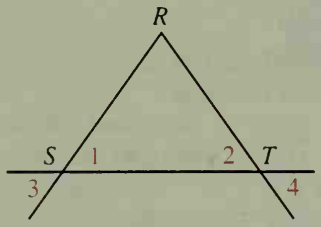
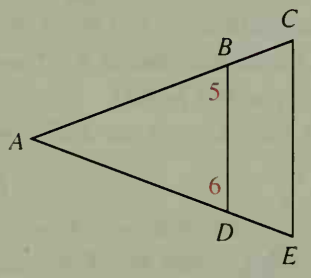


For each exercise place the statements in an appropriate order for a proof. (There may be more than one correct order.)

9. Given: $\overline{RS} \cong \overline{RT}$
Prove: $\angle 3 \cong \angle 4$
(a) $\angle 3 \cong \angle 4$
(b) $\angle 3 \cong \angle 1$; $\angle 2 \cong \angle 4$
(c) $\overline{RS} \cong \overline{RT}$
(d) $\angle 1 \cong \angle 2$



10. Given: $\overline{BD} \parallel \overline{CE}$; $\angle 5 \cong \angle 6$
Prove: $\overline{AC} \cong \overline{AE}$
(a) $\overline{BD} \parallel \overline{CE}$
(b) $\overline{AC} \cong \overline{AE}$
(c) $\angle 5 \cong \angle C$; $\angle 6 \cong \angle E$
(d) $\angle 5 \cong \angle 6$
(e) $\angle C \cong \angle E$

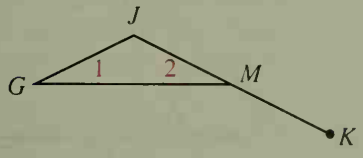


Write proofs in two-column form.

11. Theorem 4-1

12. Theorem 4-2

13. Given: M is the midpoint of $\overline{JK}$; $\angle 1 \cong \angle 2$
Prove: $\overline{JG} \cong \overline{MK}$



14. Given: $\overline{XY} \cong \overline{XZ}$
Prove: $\angle 3 \cong \angle 5$