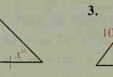
Written Exercises

Find the value of x.

A

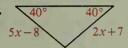


2.



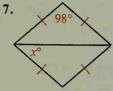




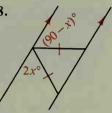


6.





8.



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

9. Given:
$$\overline{RS} \cong \overline{RT}$$

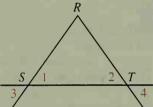
Prove:
$$\angle 3 \cong \angle 4$$

(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:
$$\overline{AC} \cong \overline{AE}$$

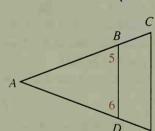
(a)
$$\overline{BD} \parallel \overline{CE}$$

(b)
$$\overline{AC} \cong \overline{AE}$$

(c)
$$\angle 5 \cong \angle C$$
; $\angle 6 \cong \angle E$

(d)
$$\angle 5 \cong \angle 6$$

(e)
$$\angle C \cong \angle E$$



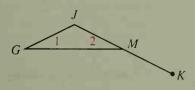
Write proofs in two-column form.

11. Theorem 4-1

13. Given: M is the midpoint of \overline{JK} ;

$$\angle 1 \cong \angle 2$$

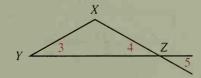
Prove: $\overline{JG} \cong \overline{MK}$



12. Theorem 4-2

14. Given: $\overline{XY} \cong \overline{XZ}$

Prove: $\angle 3 \cong \angle 5$



E