## 5-1 Practice

Form G

Midsegments of Triangles

Identify three pairs of triangle sides in each diagram.

1.
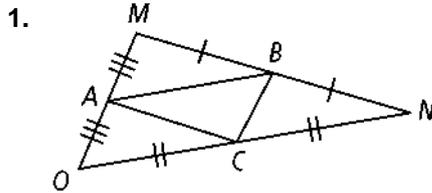
Points *M, N,* and *P* are the midpoints of the sides of □*QRS.*
***QR* = 30, *RS* = 30, and *SQ* = 18.**

9. Find *MN*.

10. Find *MQ*.

11. Find *MP*.

12. Find *PS*.

13. Find *PN*.

14. Find *RN*.
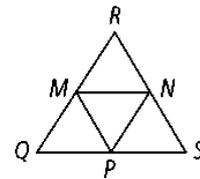
Algebra Find the value of *x*.

15.
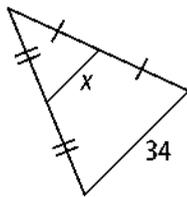
18.
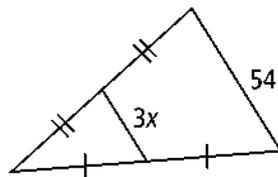
21.
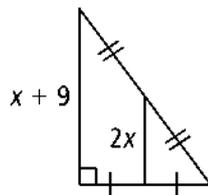
5-1

Practice (continued)   *Form G*

Midsegments of Triangles

D is the midpoint of $\overline{AB}$. E is the midpoint of $\overline{CB}$.

24. If $m\angle A = 70$, find $m\angle BDE$.

25. If $m\angle BED = 73$, find $m\angle C$.

26. If $DE = 23$, find AC.

27. If $AC = 83$, find DE.
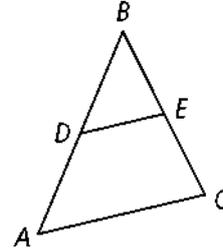
Find the distance across the lake in each diagram.

28.
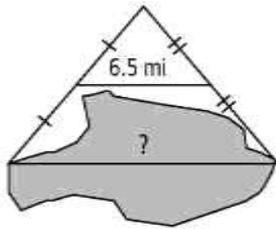
Use the diagram at the right for Exercises 31 and 32.

31. Which segment is shorter for kayaking across the lake, $\overline{AB}$ or $\overline{BC}$? Explain.

32. Which distance is shorter, kayaking from *A* to *B* to *C,* or walking from *A* to *X* to *C?* Explain.
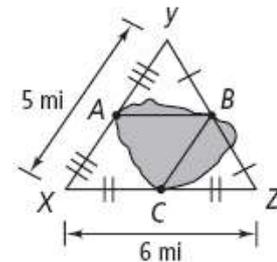
34. Coordinate Geometry The coordinates of the vertices of a triangle are *K*(2, 3), *L*(−2, −1), and *M*(5, 1).

   a. Find the coordinates of *N,* the midpoint of $\overline{KM}$, and *P,* the midpoint of $\overline{LM}$.

   b. Show that $\overline{NP} \parallel \overline{KL}$.

   c. Show that $NP = \dfrac{1}{2} KL$