Construct an angle with the indicated measure.

9. 45

10. 135

11.  $22\frac{1}{2}$ 

- **12.** 105
- 13. Draw a segment  $\overline{AB}$ . Construct a segment  $\overline{XY}$  whose length equals  $\frac{3}{4}AB$ .
- **B** 14. a. Draw an acute triangle. Construct the perpendicular bisector of each side.
  - b. Do the perpendicular bisectors intersect in one point?
  - c. Repeat parts (a) and (b) using an obtuse triangle.
  - 15. a. Draw an acute triangle. Construct the three altitudes.
    - **b.** Do the lines that contain the altitudes intersect in one point?
    - c. Repeat parts (a) and (b) using an obtuse triangle.
  - 16. a. Draw a very large acute triangle. Construct the three medians.
    - b. Do the lines that contain the medians intersect in one point?
    - c. Repeat parts (a) and (b) using an obtuse triangle.

On your paper draw figures roughly like those shown. Use them in constructing the figures described in Exercises 17-24.



- 17. A parallelogram with an  $n^{\circ}$  angle and sides of lengths a and b
- 18. A rectangle with sides of lengths a and b
- 19. A square with perimeter 2a
- **20.** A rhombus with diagonals of lengths a and b
- 21. A square with diagonals of length b
- 22. A segment of length  $\sqrt{a^2 + b^2}$
- 23. A square with diagonals of length  $b\sqrt{2}$
- **24.** A right triangle with hypotenuse of length a and one leg of length b
- C 25. Draw a segment and let its length be s. Construct a segment whose length is  $s\sqrt{3}$ .
  - **26.** Draw a diagram roughly like the one shown. Without laying your straightedge across any part of the lake, construct more of  $\overrightarrow{RS}$ .

