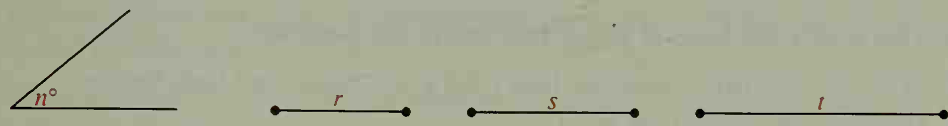
On your paper draw an angle and three segments roughly like those shown. Use them in Exercises 5–19. You may find it helpful to begin with a sketch.



5. Construct $\overline{AB}$ so that $AB = t$. Then construct the locus of all points C so that in $\triangle ABC$ the altitude from C has length r.
6. Construct $\overline{AB}$ so that $AB = t$. Then construct the locus of all points C so that in $\triangle ABC$ the median from C has length s.

B

7. Construct isosceles $\triangle ABC$ so that $AB = AC = t$ and so that the altitude from A has length s.
8. Construct an isosceles trapezoid $ABCD$ with $\overline{AB}$ the shorter base, with $AB = AD = BC = t$, and with an altitude of length r.
9. Construct $\triangle ABC$ so that $AB = t$, $AC = s$, and the median to $\overline{AB}$ has length r.
10. Construct $\triangle ABC$ so that $m\angle A = m\angle B = n$, and the altitude to $\overline{AB}$ has length s.
11. Construct $\triangle ABC$ so that $m\angle C = 90$, $m\angle A = n$, and the altitude to $\overline{AB}$ has length s.
12. Construct $\triangle ABC$ so that $AB = s$, $AC = t$, and the altitude to $\overline{AB}$ has length r.
13. Construct $\triangle ABC$ so that $AB = t$, and the median to $\overline{AB}$ and the altitude to $\overline{AB}$ have lengths s and r, respectively.
14. Construct a right triangle such that the altitude to the hypotenuse and the median to the hypotenuse have lengths r and s, respectively.
15. Construct both an acute isosceles triangle and an obtuse isosceles triangle such that each leg has length s and each altitude to a leg has length r.

C

16. Construct a square whose sides each have length $4s$. A segment of length $3s$ moves so that its endpoints are always on the sides of the square. Construct the locus of the midpoint of the moving segment.
17. Construct a right triangle such that the bisector of the right angle divides the hypotenuse into segments whose lengths are r and s.
18. Construct an isosceles right triangle such that the radius of the inscribed circle is r.
19. Construct $\overline{AB}$ so that $AB = t$. Then construct the locus of points P such that $m\angle APB = n$.