

Constructions Constructions

Part 1 Directions: On a separate sheet of paper create each construction. You may only use a straightedge, pencil, and a compass to complete each one. When you are finished name the construction you just constructed.

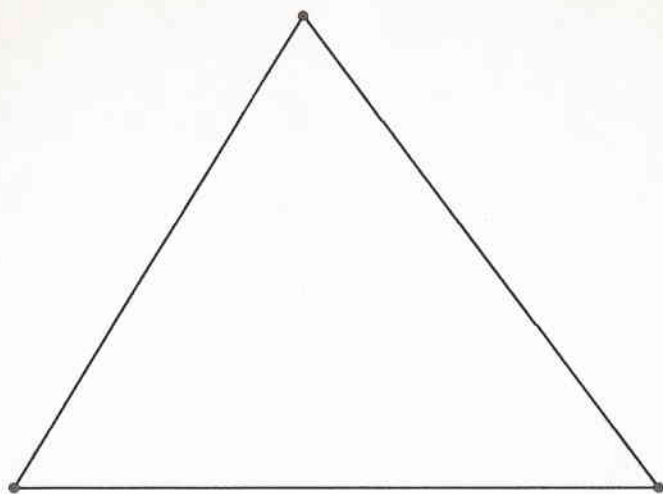
1. Construct a straight line. Construct another straight line that goes through one end of the other line to form an angle. Put one end of the compass at the vertex angle. Construct an arc through both sides of the angle. Mark where the arc intersects the lines. At one of the points you just marked put the end of the compass on the line and construct another arc, do the same with the other point. Mark where those two lines intersect. With your straight edge draw a line from the vertex angle to the point you just marked. What did you just construct? _____
2. Construct a straight line. Put your compass at the end of the line to create an arc and with the other end of the compass make it so it goes over half the distance of the line. Do the same for the other end. Mark where both arcs intersect. Draw a straight line connecting both intersections. What did you just construct? _____.

Part 2 Directions: Complete the following problems using only a compass, straightedge, and a pencil.

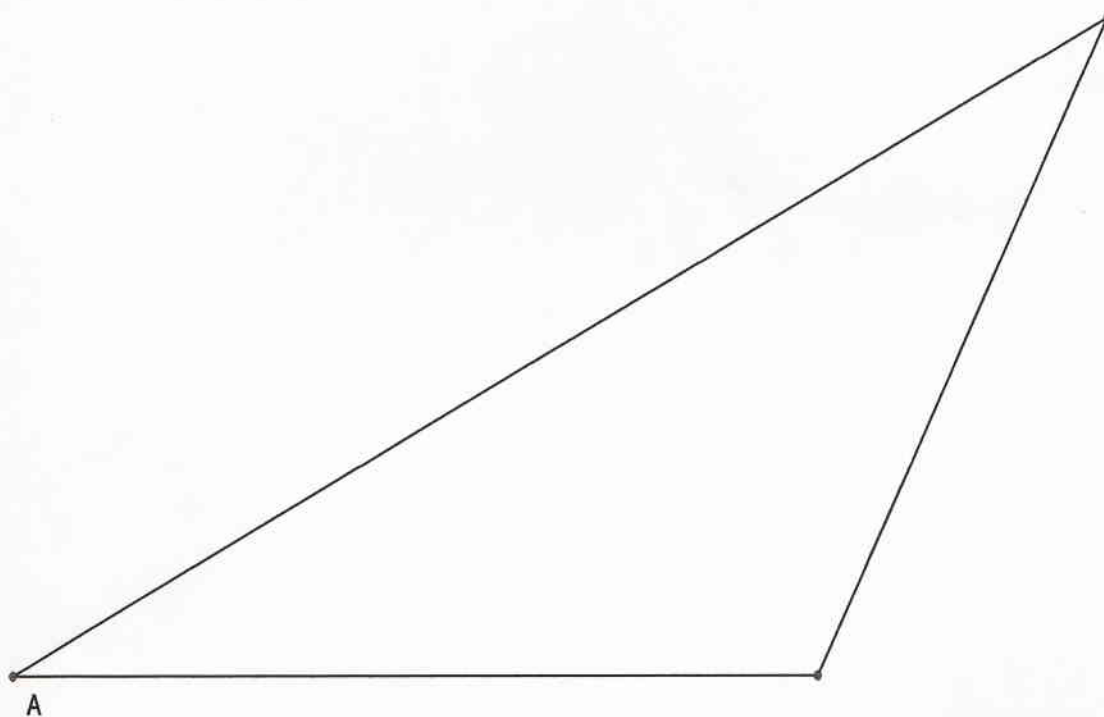
1. Draw a line perpendicular to both lines (Given: both lines \parallel to each other).



2. Construct an orthocenter around the triangle.



3. Find the altitude from point a.



Part 3 Directions: Complete the following constructions.

1. Polygon (4 sided figure)
2. Square (polygon with 4 congruent side ,4 right angle, and oppo. sides parallel).
3. Rectangle (polgon with oppo. sides congruent, 4 rt. angles, and oppo sides parallel).
4. Rhombus (polygon with oppo. angles congruent, oppo. sides congruent and parallel.
5. Kite