

# GEOMETRY

## CONSTRUCTION OF A VALENTINE

Follow the directions given to construct your valentine:

1. Draw segment AB 6 cm long in the center of a sheet of paper.
2. Construct a perpendicular bisector of AB intersecting at O. Call it XY.
3. Measure OY equal to 10 cm.
4. With A and B as centers and a radius of 3.5 cm, construct arcs of circles intersecting XO at C and AB extended at points M and N, respectively.
5. Construct a perpendicular bisector of the distance MY and let it intersect arc CN at D.
6. Using DY as a radius and D as a center construct an arc from M to Y.
7. In like manner construct an arc from N to Y using a point on arc MC as a center.

You may want a different size heart; if so, double all dimensions or use some other proportion.

