**Directions: Use the markers to sketch the locus of points for each question below.**

 1) In the diagram below, car *A* is parked 7 miles from car *B.* Sketch the points that are 4 miles from car *A* and sketch the points that are 4 miles from car *B.* Label with an **X** all points that satisfy both conditions.



 2) The length of  is 3 inches. On the diagram below, sketch the points that are equidistant from *A* and *B* and sketch the points that are 2 inches from A. Label with an **X** all points that satisfy both conditions.



3) In the accompanying diagram, point *P* lies 3 centimeters from line . How many points are both 2 centimeters from line  and 1 centimeter from point *P*? Sketch a picture to support your claim.



4) Sketch the locus of points 3 units away from the line segment below.