

GEOMETRY

Bisecting

NAME \_\_\_\_\_

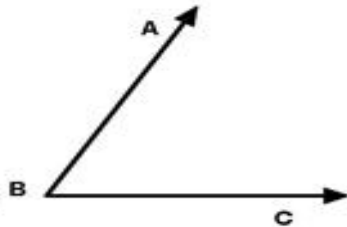
DATE \_\_\_\_\_ Per. \_\_\_\_\_

Constructions

4. a) Put sharp point of compass on endpoint A. Extend compass to more than half the length of the segment and construct an arc intersecting it.  
 b) Repeat process on endpoint B with the same extension on compass.  
 c) Label the arc intersections X & Y.  
 d) Draw line XY crossing segment AB. Label point of intersection M.  
 e) Measure AM, MB, and AB (in. or cm)  
 AM = \_\_\_\_\_  
 MB = \_\_\_\_\_  
 AB = \_\_\_\_\_  
 f) XY is the perpendicular \_\_\_\_\_ of AB.



5. a) Put sharp point of compass on B. Draw an arc intersecting both sides. Label these intersecting points X and Y.  
 b) Put sharp point on X. Draw an arc in the middle area. With compass the same length, put sharp point on Y. Draw an arc crossing the first arc, and label this intersection M.  
 c) Connect points B and M to make ray BM.  
 d)  $m\angle ABM = \underline{\hspace{2cm}}$   
 $m\angle MBC = \underline{\hspace{2cm}}$   
 $m\angle ABC = \underline{\hspace{2cm}}$   
 e) Based on part d), what have you constructed?



6. Bisect each figure below.

a)



b)

