

## Constructing Perpendicular Bisectors

### Method 1: Paper Folding

1. Draw a line segment AB.
2. Fold the paper so that point A lies on point B.
3. Open the paper and use a ruler to draw a line segment along the fold. Label the intersection point P.
4. Use a ruler to measure the two parts of AB to check they are equal. Use a protractor to measure the angles to check each is  $90^\circ$ .



### Method 2: Mira

1. Draw a line segment AB.
2. Place the Mira so that the reflection image of point A lies on Point B.
3. Draw a line segment along the edge of the Mira.
4. Verify the perpendicular bisector.



## Constructing Perpendicular Bisectors (cont'd)

### Method 3: Compass

1. Draw a line segment AB.
2. Set the compass so the distance between the compass and pencil points is greater than one-half the length of AB.
3. Place the compass point on A. Draw an arc. Do not change the distance between the compass point and pencil tip. Place the compass point on B. Draw a second arc that intersects the first.
3. Label the points of intersection C and D. Use a ruler to draw line segment CD.
4. Verify that CD is the perpendicular bisector of AB.

