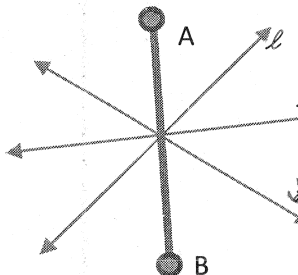
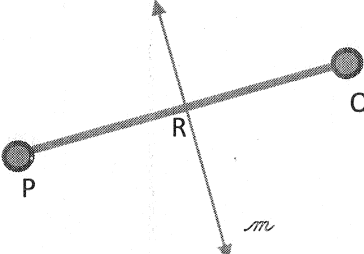
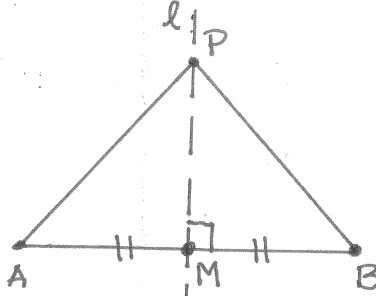


H. Geometry – Chapter 3 – Definition Sheet

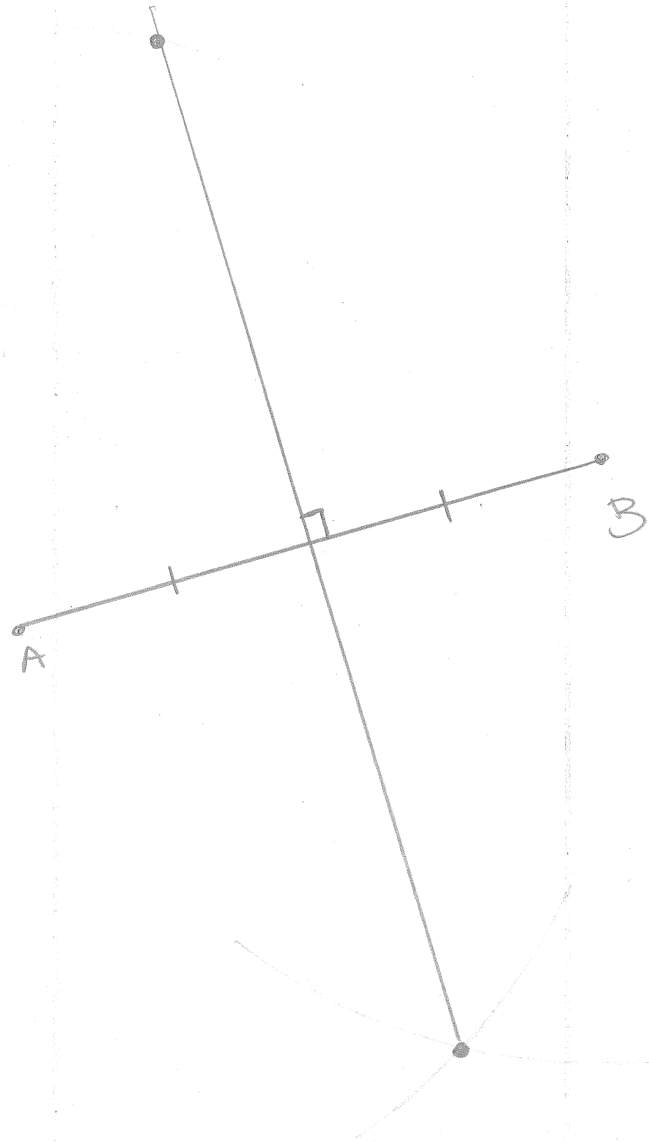
Section 3.2

<p>Segment Bisector • Definition</p>	<p>A line (or segment or ray) that passes through the <u>midpoint</u> of a segment.</p>  <p>j, k, l bisect \overline{AB}</p>
<p>Perpendicular Bisector • Definition</p>	<p>- A segment bisector that is also perpendicular to the line segment</p>  <p>m is the \perp bisector of \overline{PQ}</p>
<p>Perpendicular Bisector Conjecture</p>	<ul style="list-style-type: none"> If a point is on the <u>perpendicular bisector</u>, then it is <u>equidistant</u> from the endpoints of the segment. <p>Example:</p>  <p>If l is \perp bisector of \overline{AB}, then $PA = PB$</p>
<p>Converse of the Perpendicular Bisector Conjecture</p>	<ul style="list-style-type: none"> If a point is <u>equidistant</u> from the endpoints of a segment, then it lies on the <u>perpendicular bisector</u> of the segment.

H. Geometry – Chapter 3 – Definition Sheet

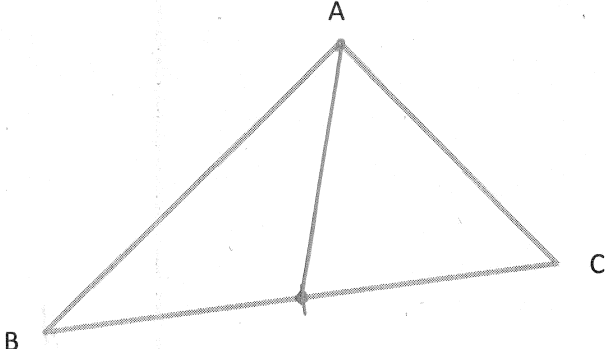
Perpendicular Bisector Construction

- (1) With straightedge, draw a line segment.
- (2) With compass, measure out segment.
- (3) Draw arcs above & below segment
- (4) Where two points intersect, draw a line



Note: Knowing how to construct the perpendicular bisector of a segment means you can construct the midpoint of a segment.

H. Geometry – Chapter 3 – Definition Sheet

<p><u>median</u> of a triangle</p>	<ul style="list-style-type: none">The segment connecting a vertex of a triangle to the <u>midpoint</u> of the opposite side.
<p>Construct the median \overline{AM}</p> <ol style="list-style-type: none">Use perp. bisector construction to find midpointDraw segment from A to midpoint mark	
<p><u>midsegment</u> of a triangle</p>	<ul style="list-style-type: none">The segment connecting the _____ of two sides of a triangle <p>How to construct it:</p> <ol style="list-style-type: none">construct \perp bisectors of 2 sides of the triangles to find the midpointsDraw segment between the midpoints.