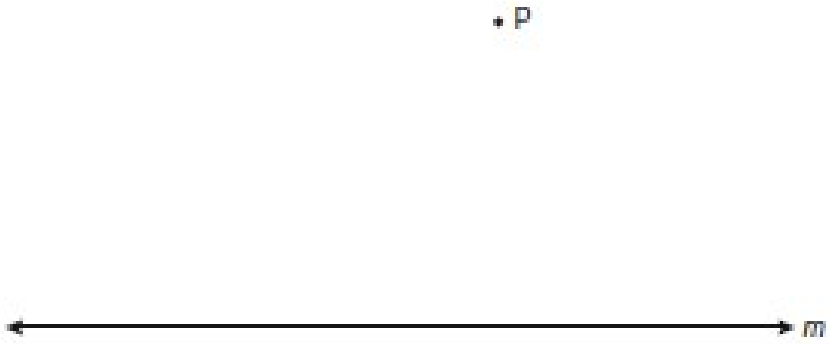
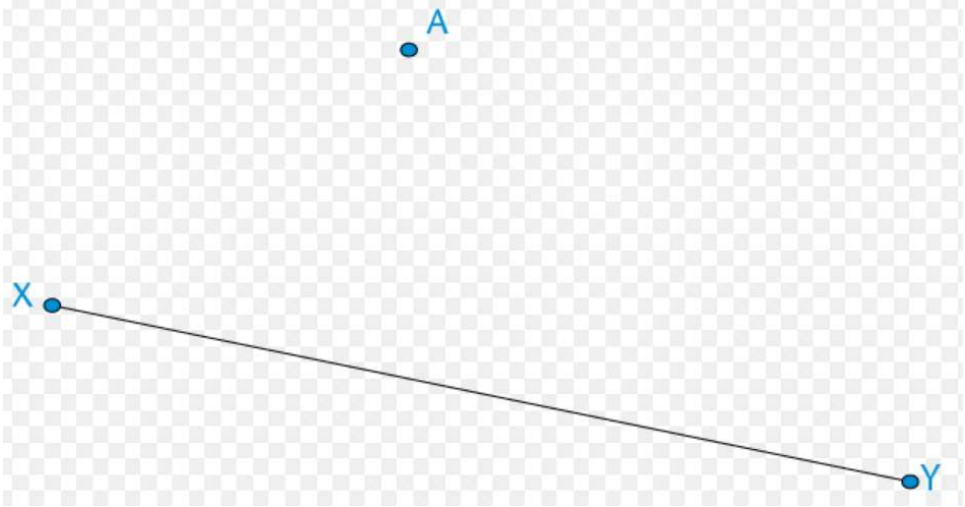
Name _____ Date _____
Mr. Schlansky Geometry

Constructions Using Perpendicular Bisector

1. Using a compass and straightedge, construct a line that passes through point *P* and is perpendicular to line *m*. [Leave all construction marks.]

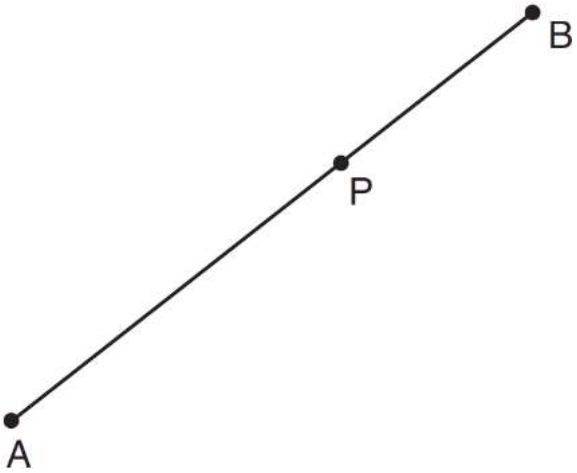


2. Using a compass and straightedge, construct a line that passes through point *A* and is perpendicular to $\overline{XY}$. [Leave all construction marks.]

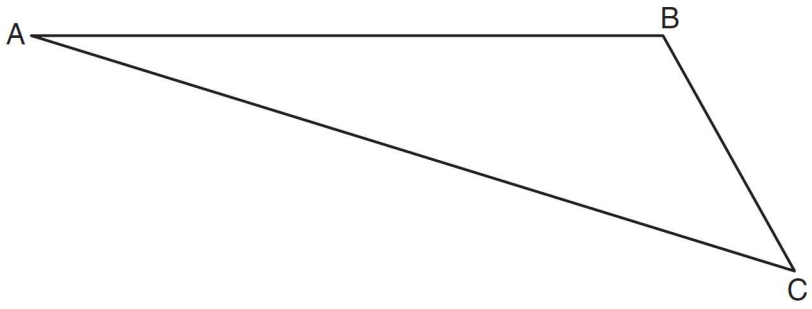


3. Using a compass and a straightedge, construct a line perpendicular to the given line that passes through the given point.

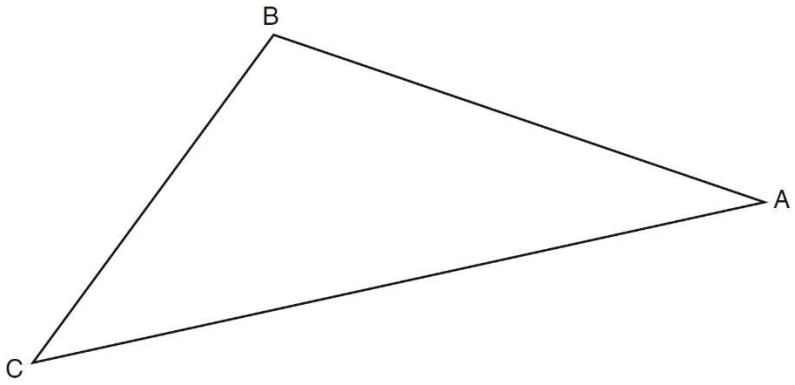
4. Using a compass and straightedge, construct a line perpendicular to $\overline{AB}$ through point *P*. [Leave all construction marks.]



5. On the diagram of $\triangle ABC$ shown below, use a compass and straightedge to construct a median to side $\overline{AC}$. [Leave all construction marks.]



6. Using a compass and straightedge, construct a median to side BC. [Leave all construction marks.]



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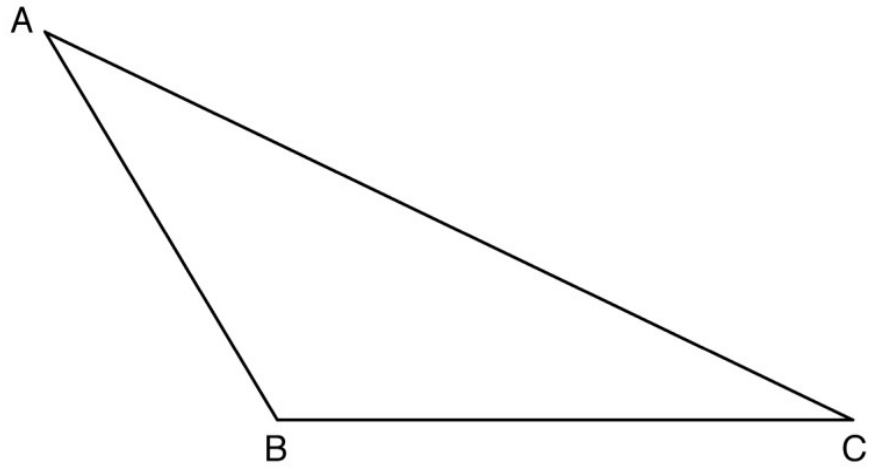
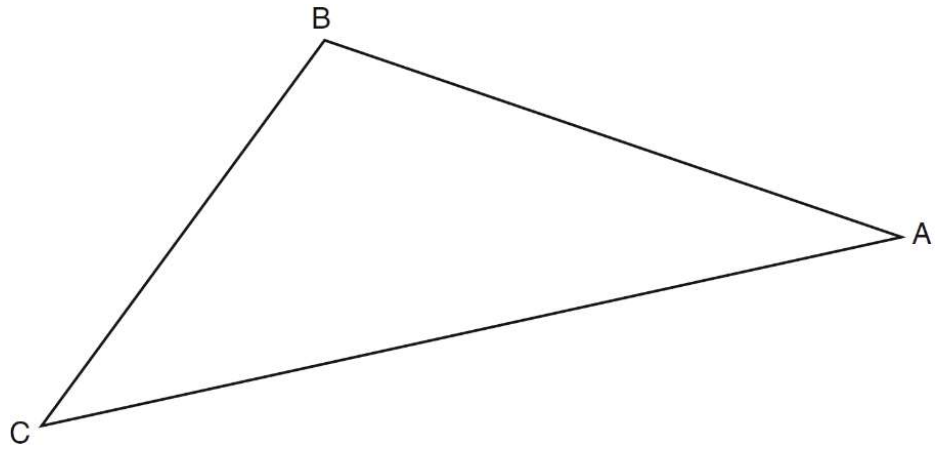
7. On the diagram of $\triangle ABC$ shown below, use a compass and straightedge to construct a median to side $\overline{AC}$. [Leave all construction marks.]



8. Using a compass and straightedge, construct a median to side AB. [Leave all construction marks.]



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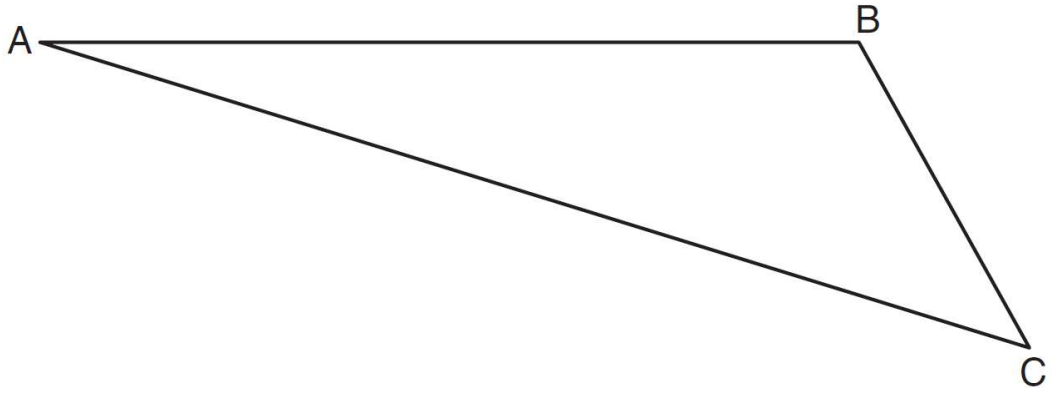
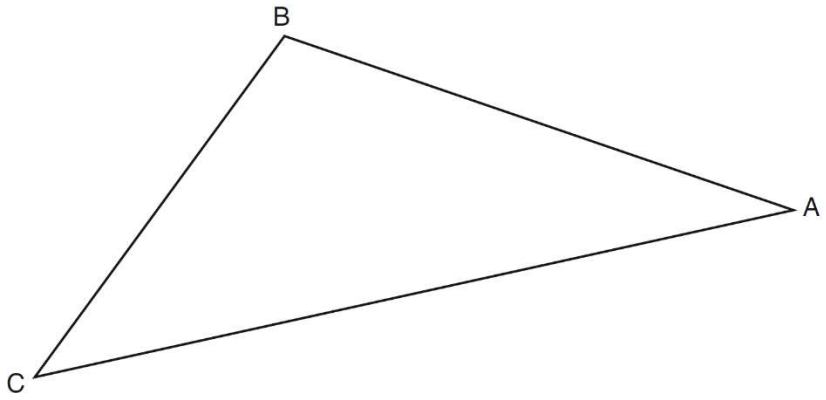
9. On the diagram of $\triangle ABC$ shown below, use a compass and straightedge to construct an altitude from B to side $\overline{AC}$. [Leave all construction marks.]



10. Using a compass and straightedge, construct an altitude from B to side AC. [Leave all construction marks.]



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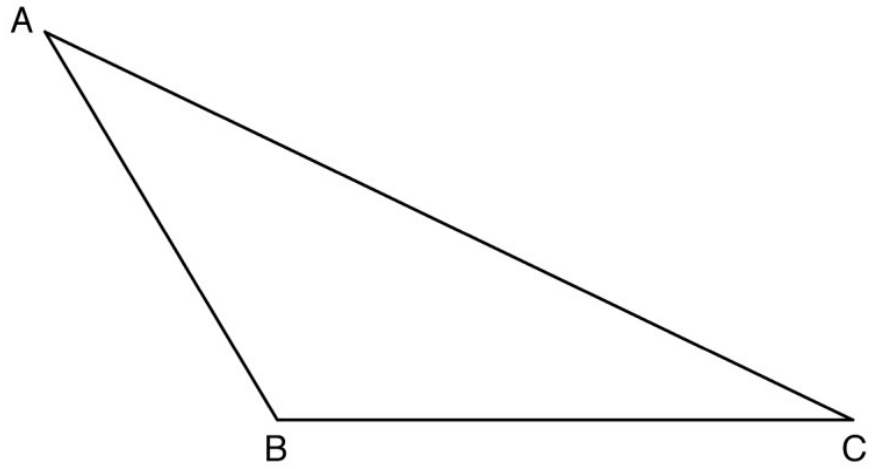
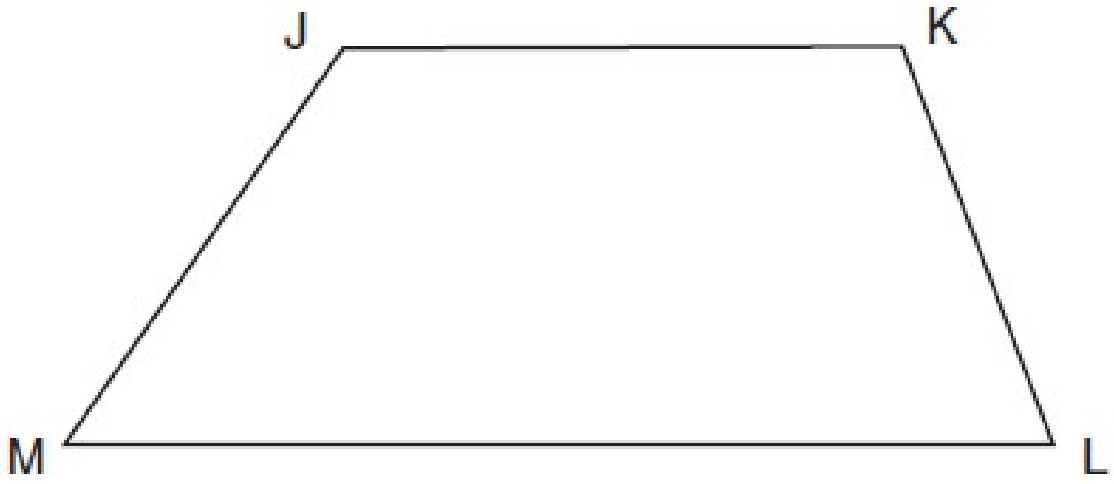
11. On the diagram of $\triangle ABC$ shown below, use a compass and straightedge to construct an altitude to side $\overline{AC}$. [Leave all construction marks.]



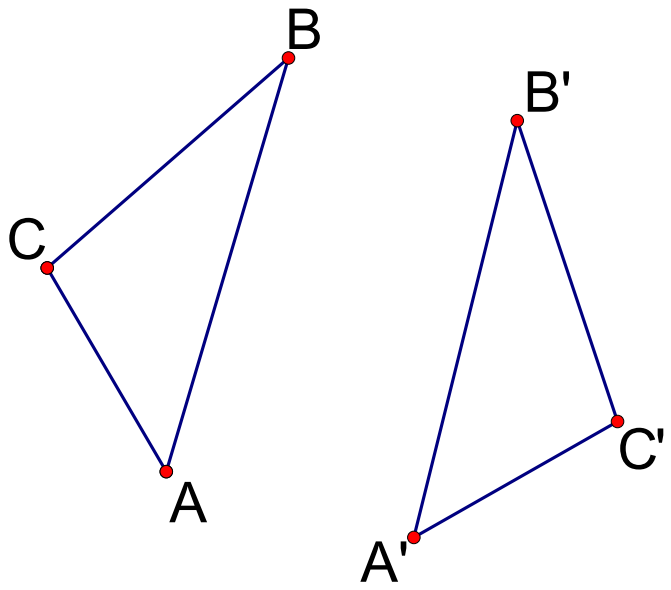
12. Given: Trapezoid *JKLM* with $\overline{JK} \parallel \overline{ML}$

Using a compass and straightedge, construct the altitude from vertex *J* to $\overline{ML}$. [Leave all construction marks.]



Find the line of reflection for each of the following sets of diagrams

13.



14.