

Geometer's Sketchpad  
Parallel Lines  
NCTM Standards  
WV IGOs G.1, G.5, G.6

1. Using the tool box and segment tool, construct two segments that intersect at a point other than the endpoints. Using the menu bar, construct a point at the intersection. Measure the four angles and verify vertical angles are congruent. Using the calculator, verify that a linear pair is supplementary. Demonstrate that perpendicular lines form four right angles. Show the instructor.
2. Using the tool box and line tool construct a horizontal line. Using the point tool, construct a point above the line. Using the menu bar, construct a line through the point that is parallel to your original line.

Using the tool box and the line tool, construct a line that intersects both of the parallel lines. Using the menu bar, construct a point on the top line. This point will be used when measuring the angles. Using the menu bar, construct a point at both intersections of the third line and the parallel lines.

Measure all eight angles. Click and drag some of the points and notice the measures of the angles.

Make a sketch below, complete with measures of the angles.

Show the instructor.

