Geometry Unit 1 Task 3

Your Park design was a success. Now the City planning office has bigger plans for you; truss engineering. You will be given a piece of graph paper, a protractor, and a ruler. Reproduce a standard truss design as large as possible on your graph paper.
• Identify all midpoints and medians.
• Measure all angles in all triangles and show that the sum of the angles of each triangle equals 180°.
• Identify a mid-segment, formulate a conjecture about its relationship to the base of the triangle, and verify your conjecture using measurement.
• Calculate all measurements for all parts of the truss.
• Why are the midpoints and medians important elements in the truss design? Explain in at least three sentences.