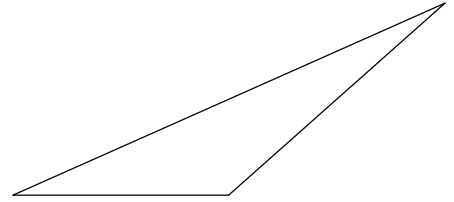
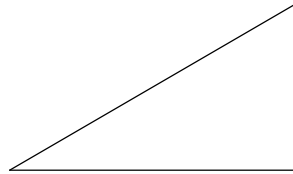
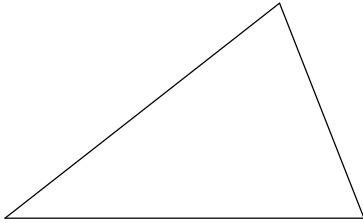


Geometry – Constructions

Assignment #9 (complete all constructions in homework notebook)

1. Using multiple methods to construct congruent triangles. For each of the three triangles, construct three triangles that are each congruent to the original (one with SSS method, another with SAS method, and the third with ASA method).



Given (for use in various problems below): segment AB with length 3

2. (a) Construct an equilateral triangle with side length 3, (b) construct *one* exterior angle for triangle in part a.
3. Construct a triangle with side lengths of 3 and 6 and an included angle for these sides that measures 120° .
4. Construct segments with the following lengths: (a) 4.5, (b) 9, and (c) 13.5
5. Choose *four* of the following measures and construct angles with those: (a) 30° , (b) 90° , (c) 45° , (d) 75° , (e) 105° , and (f) 150°

For #6-8, first construct a congruent triangle using any of the three methods from #1.

6. Choose *one* of the triangles from #1 and construct the three perpendicular bisectors for this triangle.
7. Choose *one* of the triangles from #1 and construct the three medians for this triangle.
8. Choose *one* of the triangles from #1 and construct the three angle bisectors for this triangle.

Extra Credit:

For problems #2, 5-8 that specify an amount in bold and italics like *four*, you may do the others for extra credit.