

GSP 9.1 Triangles and Quadrilaterals

- ✓ Choose a partner.
- ✓ Name example: Smith_Jones_9.1TrianglesandQuadrilaterals.gsp
- ✓ Save your work frequently. Sometimes the network crashes your application.

Use the ideas from the Introduction and Constructions lab work to construct each of the following geometric shapes. The shapes that you create must remain that shape no matter how they are rotated, stretched, enlarged, or shrunk (This is called being “**flexible**”). For example, an equilateral triangle must remain an equilateral triangle no matter how the shape is manipulated.

- Use multiple tabs.
 - When you are done with each shape, use the *Label Tool* and label each shape with the name given below.
1. Equilateral triangle (Tab 1)
Use measurements and/or words to show and explain why the triangle is always an equilateral triangle (i.e., you have constructed a flexible equilateral triangle).
 2. Isosceles triangle (Tab 2)
Use measurements and/or words to show and explain why the triangle is always an isosceles triangle (i.e., you have constructed a flexible isosceles triangle).
 3. Trapezoid (Tab 3)
Use measurements and words to show and explain why the polygon is always a trapezoid (i.e., you have constructed a flexible trapezoid).
 4. Isosceles trapezoid (Tab 4)
Use measurements and words to show and explain why the polygon is always an isosceles trapezoid (i.e., you have constructed a flexible isosceles trapezoid).
 5. Rhombus (Tab 5)
Use measurements and words to show and explain why the polygon is always a rhombus (i.e., you have constructed a flexible rhombus).
 6. Parallelogram (non-rhombus) (Tab 6)
Use measurements and words to show and explain why the polygon is always a parallelogram but not a rhombus (i.e., you have constructed a flexible parallelogram).
 7. Rectangle (Tab 7)
Use measurements and words to show and explain why the polygon is always a rectangle (i.e., you have constructed a flexible rectangle).