

Open a new sketch in Sketchpad (4.0).

**Construct a figure to support the following statement.**

**1. If a triangle is isosceles, then it is a right triangle.**

Label the figure using the text tool and make measurements of appropriate sides and angles and display them for me to see.

Now construct another figure next to the first which is a counterexample to the statement. Again label the figure and display appropriate measurements.

Create a new page in your sketchpad file by selecting Document Options under the File menu. A dialog box will open. Click on Add Page and a menu will open. Select Blank Page and click OK. A blank page will open and you should notice tabs at the bottom left corner of the page with labels 1 and 2. You can click on the tabs to move from one page to the next. For the following problem, use page 2.

**Construct a figure to support the following statement.**

**2. The sum of the lengths of any two sides of a triangle is always less than the length of the third side of the triangle.**

Label the figure and display measurements to support your construction.

Now construct another figure next to the first which is a counterexample to the statement. Again label and display.

**Create another new page in your file and construct figures to support the following statement.**

**3. The bisector of an angle of a triangle bisects the opposite side.**

Construct a counterexample and label and display as for the other figures.