Problem Solving: Make and Test Generalizations

In 1 through 5, test the generalization and state whether it appears to be correct or incorrect. If incorrect, give an example to support why.

1. All triangles have right angles.

2. All rectangles have right angles.

3. Any two triangles can be joined to make a rhombus.

4. All rectangles can be cut in half vertically or horizontally to make two smaller rectangles that are the same size and same shape.

5. Intersecting lines are also parallel.

6. How many whole numbers have exactly three digits? Hint: 999 is the greatest whole number with three digits.
   A  890  B  900  C  990  D  999

7. How can you show that a generalization is likely correct?