Problem Solving: Missing Angle Problems

Solve. Explain why your answer makes sense.

1. Bethany’s herb garden is shaped like an equilateral triangle. What are the angle measures of the garden? 
   **Hint:** an equilateral triangle has three equal sides and three equal angles.

2. The tree, rope, and ground in the picture form a right triangle. If one angle of the triangle is 30°, what are the other two angle measures? Remember that a right triangle has one right angle.

3. Edwin hikes through the woods, starting and ending at his back door. He turns three times, so that his path takes the shape of a quadrilateral. The angles of his turns measure 80°, 130° and 100°. What angle is formed when he reaches his starting point?

4. John is drawing a parallelogram. One angle measures 120°. What are the measures of the other three angles?

5. At the circus, Shawn saw seals standing on a trapezoid that had opposite sides equal. If one of the angles of the trapezoid was 135°, what were the other three angle measurements?

6. Isabella drew a right triangle for homework, but she has to find all the possible angle measures. Write three angle measure combinations that could be possible for a right triangle.