Open-Response Questions (10 points). **_Show all work on the grid!!!!!_**

ORQ 1: **"Ship to Shore"**

A captain of a ship spots the top of a lighthouse at a 53° angle of elevation. He knows that the lighthouse is 60ft above the shoreline. How far is the ship from the shore?

   a) **Draw and label** a picture to represent the lighthouse, shore, and angle of elevation.
   b) **Calculate** the distance of the ship from the shore.
   c) **How far** would the ship be from the shore of the angle of elevation was 70°?