Ch. 3 Law of Sines, Cosines, Area of Triangle Test Review (WS #3) Help Session

For each of the below problems: A) Solve the triangle B) Find the Area of triangle

1) Given $C = 51^{\circ}$, b = 7.9ft, and c = 6.5ft

2) Given a = 5km, b = 7km, and c = 9km.

- 3) a) Find the Height b) Solve the triangle
- . **Finding the Height of the Bridge over the Royal Gorge** The highest bridge in the world is the bridge over the Royal Gorge of the Arkansas River in Colorado. Sightings to the same point at the water level directly under the bridge are taken from each side of the 880-foot-long bridge, as indicated in the figure. How high is the bridge?



4) Michael and Jim are standing in a line and are both looking at the Sears Tower. The angle of elevation from Michael to the top of the tower is 40° and Jim's is 25°. The tower is 2000 feet tall. What is the distance between Michael and Jim?

5) A piece of commercial real estate is priced at \$3.50 per square foot. Find the cost, to the nearest dollar, of a triangular lot measuring 320 feet by 510 feet by 410 feet.