Review of Sections 6.1 and 6.2

1. An isosceles triangle has sides of length 28, 28, and 39. Find the measures of all three angles. **Round answers to three decimal places.**

2. Two airplanes leave an airport at the same time on different runways. The angle between the runways is $85°$. One flies at 420 miles per hour and the other flies at 370 miles per hour. How far apart will the airplanes be after three hours? **Round final answer to three decimal place.**

3. Given an oblique triangle with $C = 72°, A = 15°, b = 342.6$, find side a **to the nearest thousandth**

4. A parallelogram has a $58°$ angle and sides 14 cm and 18 cm long. Find the length of the longer diagonal to **three decimal places** and the length of the shorter diagonal to **three decimal places**.

5. Find the area of a regular pentagon inscribed in a circle of radius 28 inches. **Round final answer to three decimal places**
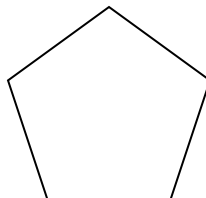
6. A triangular plot of ground has sides 720 feet and 666 feet, and 624 feet. Find the area of the plot. **Round final answer to three decimal places**.

7) Two women 320 feet apart observe a hill between them. The respective angles of elevation to the top of the hill are 69.4º and 52.6°. Find the height of the hill to two decimal places.

8) MT is a median of triangle MAH.

If m = 3 inches, a = 8 inches, h=9 inches, find the length of MT to the   .
nearest tenth of an inch