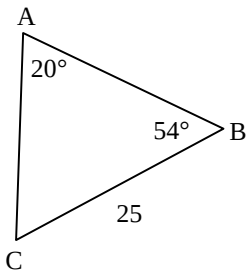
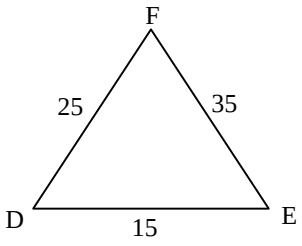
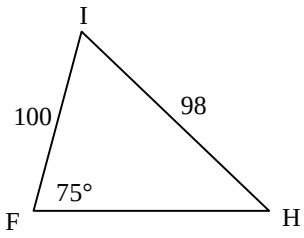
Pre-Calculus Chapter 6 Test Individual Test Review
All answers must be accurate to 2 decimal places.

1. Solve ΔABC and find $\angle F$ in ΔDEF:

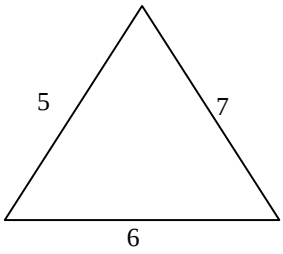


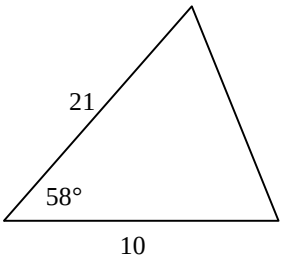


2. Find $m\angle I$:



3. Find the area of each triangle below. You must use Heron's formula, $A = \sqrt{s(s-a)(s-b)(s-c)}$, on one, and the formula for area of an oblique triangle, $A = \frac{1}{2}bc\sin A$, on the other. You must show your work.



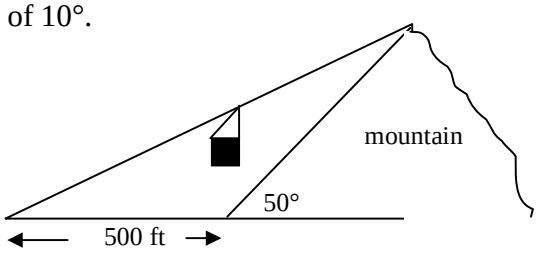


4. You and Bob are standing on point A. You walk 100 meters to point B. Bob walks 125 meters to point C. There is a 50° angle between your path and Bob's path.

   a) What is the distance between points B and C?

   b) What is the measure of $\angle BAC$?

5. An aerial tram stats at a point 500 feet from the base of a mountain whose face has a 50° angle of elevation. The tram ascends at an angle of 10°.



a) What is the length of the cable?

b) How high is the mountain?