## Pre-Calculus: Lesson 6.1: Law of Sines Day 1: p. 410 \#7-21 odd Day2: p. 410 \#31-

 39 oddPlease complete the assignment using the "tri-fold" method (You may use www.calcchat.com to check your work):

## Procedures and Problem Solving

Using the Law of Sines In Exercises 7-26, use the Law of Sines to solve the triangle.
7.

8.

10.

12.

13. $A=36^{\circ}, \quad a=8, \quad b=5$
14. $A=76^{\circ}, \quad a=34, \quad b=21$
15. $A=102.4^{\circ}, \quad C=16.7^{\circ}, \quad a=21.6$
16. $A=24.3^{\circ}, \quad C=54.6^{\circ}, \quad c=2.68$
17. $A=110^{\circ} 15^{\prime}, \quad a=48, \quad b=16$
18. $B=2^{\circ} 45^{\prime}, \quad b=6.2, \quad c=5.8$
'19. $A=110^{\circ}, \quad a=125, \quad b=100$
20. $A=55^{\circ}, \quad B=42^{\circ}, \quad c=\frac{3}{4}$
21. $B=28^{\circ}, \quad C=104^{\circ}, \quad a=3 \frac{5}{8}$

Using the Law of Sines In Exercises 31-34, find the value(s) of $b$ such that the triangle has (a) one solution,
(b) two solutions, and (c) no solution.
31. $A=36^{\circ}, \quad a=5$
32. $A=60^{\circ}, \quad a=10$
33. $A=10^{\circ}, \quad a=10.8$
34. $A=88^{\circ}, \quad a=315.6$

Finding the Area of a Triangle In Exercises 35-40, find the area of the triangle having the indicated angle and sides.
35. $C=110^{\circ}, \quad a=6, \quad b=10$
36. $B=130^{\circ}, \quad a=92, \quad c=30$
37. $A=38^{\circ} 45^{\prime}, \quad b=67, \quad c=85$
38. $A=5^{\circ} 15^{\prime}, \quad b=4.5, \quad c=22$
39. $B=75^{\circ} 15^{\prime}, \quad a=103, \quad c=58$
40. $C=85^{\circ} 45^{\prime}, \quad a=16, \quad b=20$

