Acc Pre Calc
Unit 6: Law of Sines, Cosines TEST Review

Solve the triangle.

1. C = 125.7^{o} a = 6.25 b = 2.15

2. B = 8.75^{o} a = 25 c = 15

3. C = 145^{o} b = 4 c= 14

4. A = 110.25^{o} a = 48 b = 16

5. A = 58^{o} a = 4.5 b = 5

6. C = 110^{o} b = 100 c = 125

7. $A = 36^o$ $a = 5$ $c = 13$

8. $a = 75.4$ $b = 52$ $c = 52$

Find the area of the triangle.

9. $a = 5$ $b = 7$ $c = 10$

10. $a = 2.5$ $b = 10.2$ $c = 9$

11. $C = 120^o$ $a = 4$ $b = 6$

12. $B = 130^o$ $a = 62$ $c = 20$

Solve each problem. Draw any diagrams necessary and show all work.

13. Because of the prevailing winds, a tree grew so that it was leaning to the right 6^o from the vertical. At a point 100 feet away to the left of the tree, the angle of elevation to the top of the tree is 22.83^o. Find the height of the tree.

14. The angles of elevation to an airplane from two points A and B on level ground are 51^o and 68^o respectively. The points A and B are 6 miles apart, and the airplane is between those positions. Find the altitude of the plane.

15. Find the area of triangular parcel of land if its sides are 400 ft, 500 ft and 700 ft.

16. A triangular parcel of land has 375 ft of frontage, and the other boundaries have lengths of 250 ft and 300ft. What angles does the frontage make with the other two boundaries?

17. In order to determine the distance between two aircraft, a tracking station continuously determines the distance to each aircraft and the angle A between them. Determine the distance a between the planes when $A = 42^{o}$, b = 35 miles, and c = 20 miles.