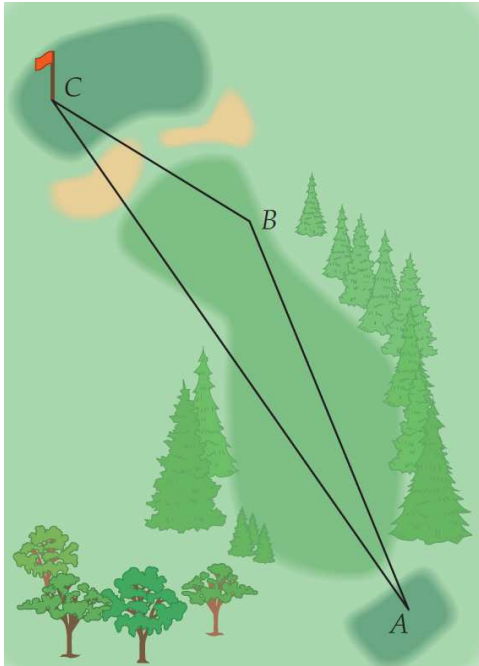


YOUR NAME: \_\_\_\_\_

George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. **GOOD LUCK!!**

1. A golfer drives a golf ball from the tee at point A to point B. The distance AC is 365 yards, Angle A measures  $12^\circ$  and angle C measures  $23^\circ$ .



- (a) Find the distance AB that the golfer drove the ball.

- (b) Find the distance BC from the present position of the ball to the pin.

2. A developer owns a triangular lot at the intersection of two streets. The streets meet at an angle of  $72^\circ$  and the lot has 300 feet of frontage along one street and 416 feet of frontage along the other street. Find the length of the third side of the lot.

3. Suppose that in triangle, we have  $A = 116^\circ$ ,  $B = 34^\circ$  and  $c = 8.5$  inches. Solve the triangle (i.e., find the lengths of all missing sides and sizes of all missing angles).