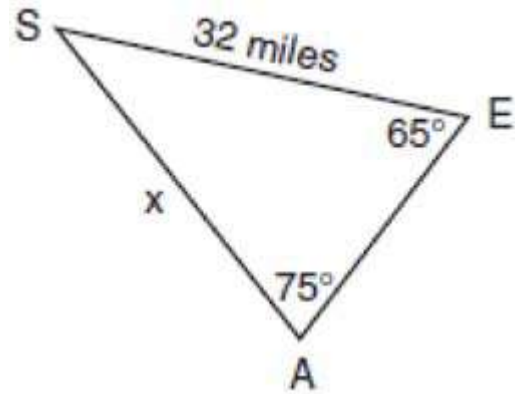


Name:

Name:

- Name:

4) The accompanying diagram shows the approximate linear distances traveled by a sailboat during a race. The sailboat started at point S, traveled to points E and A, respectively, and ended at point S. Find x , the distance from point A to point S. (Leave the answer in exact form...no need to find trig ratios.)



5) A surveyor is mapping a triangular plot of land. He measures two of the sides and the angle formed by these two sides and finds that the lengths are 400 yards and 200 yards and the included angle is $\frac{\pi}{3}$

a) What is the measure of the third side of the plot of land?

b) What is the area of this plot of land?