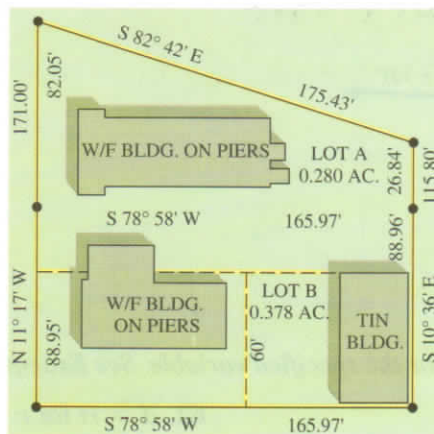


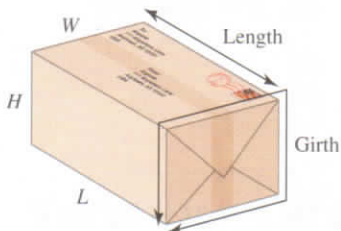
49. The survey plat depicted here shows two lots that form a trapezoid. The measures of the parallel sides are 115.80 ft and 171.00 ft. The height of the trapezoid is 165.97 ft. Find the combined area of the two lots. Round your answer to the nearest hundredth of a square foot.



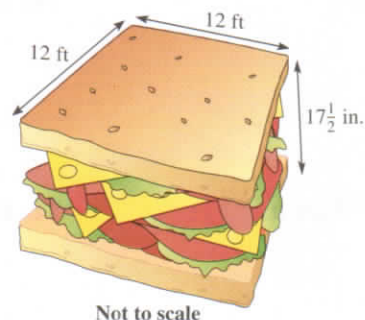
Source: Property survey in New Roads, Louisiana.

50. Lot A in the figure is in the shape of a trapezoid. The parallel sides measure 26.84 ft and 82.05 ft. The height of the trapezoid is 165.97 ft. Find the area of Lot A. Round your answer to the nearest hundredth of a square foot.

51. The U.S. Postal Service requires that any box sent by Priority Mail[®] have length plus girth (distance around) totaling no more than 108 in. The maximum volume that meets this condition is contained by a box with a square end 18 in. on each side. What is the length of the box? What is the maximum volume? (Source: United States Postal Service.)



52. On March 17, 2005, a new record was set for the world's largest sandwich. The fillings of this sandwich were corned beef, cheese, lettuce, and mustard. The sandwich, made by Wild Woody's Chill and Grill in Roseville, Michigan, was 12 ft long, 12 ft wide, and $17\frac{1}{2}$ in. ($1\frac{11}{24}$ ft) thick. What was the volume of the sandwich? (Source: Guinness World Records.)



Find the measure of each marked angle. See Example 5.

