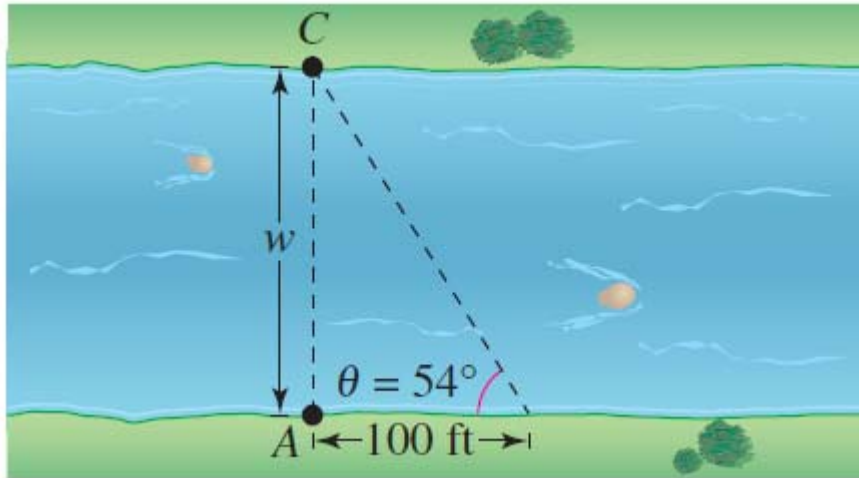
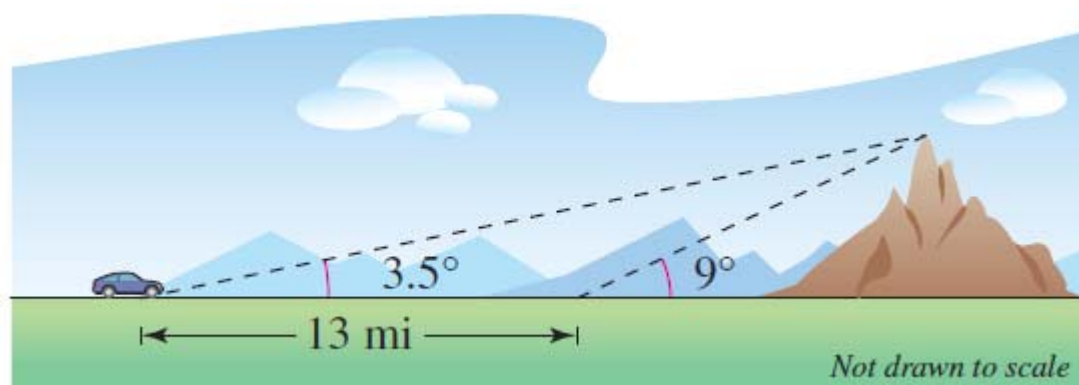


Pg. 306 4.3C - Trigonometry Word Problems

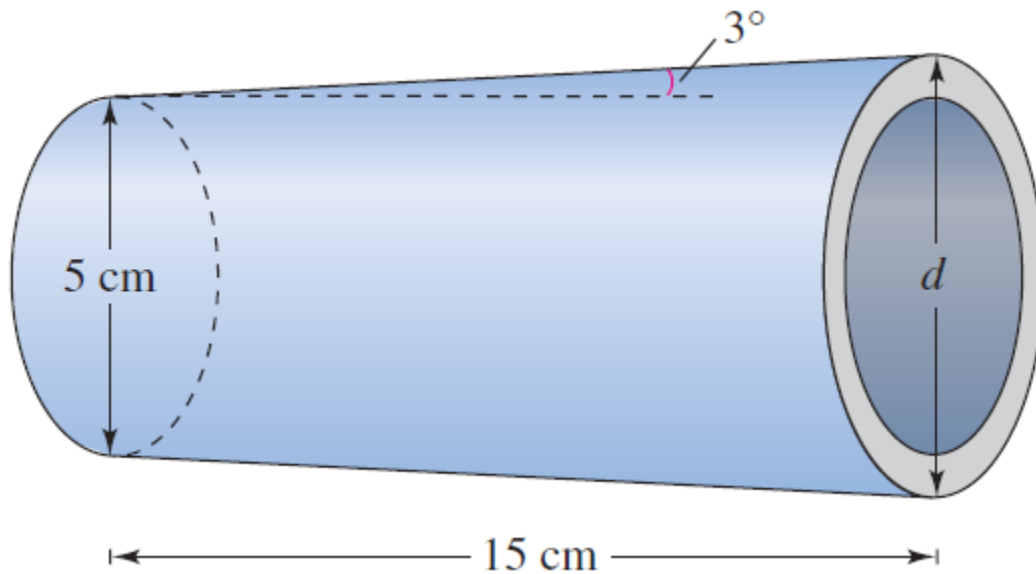
Width of a River A biologist wants to know the width w of a river so in order to properly set instruments for studying the pollutants in the water. From point A , the biologist walks downstream 100 feet and sights to point C (see figure). From this sighting, it is determined that $\theta = 54^\circ$. How wide is the river?



Height of a Mountain In traveling across flat land, you notice a mountain directly in front of you. Its angle of elevation (to the peak) is 3.5° . After you drive 13 miles closer to the mountain, the angle of elevation is 9° . Approximate the height of the mountain.



Machine Shop Calculations A tapered shaft has a diameter of 5 centimeters at the small end and is 15 centimeters long (see figure). The taper is 3° . Find the diameter d of the large end of the shaft.



Assignment 4.3C

Pg. 310 **REQUIRED:** Vocab #3 Problem Set #'s 63-71 ODD