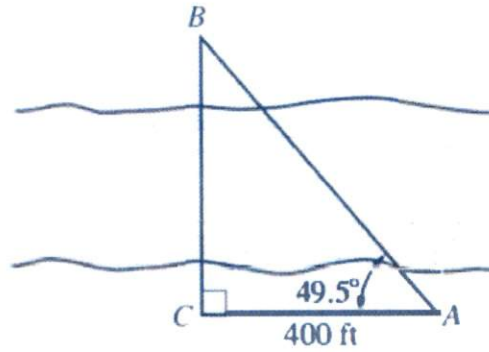


1-39

Determine the distance between two points BC across the river shown in Fig. P1-39 if the angle at C is laid out at an angle of 90° , the distance CA is laid out 400 ft away, and angle A is measured to be 49.5° .

Solution.



$$\tan 49.5^\circ = \frac{BC}{AC}$$

$$\begin{aligned} BC &= AC \tan 49.5^\circ \\ &= 400 \text{ ft} (\tan 49.5^\circ) \\ &= 468 \text{ ft} \end{aligned}$$