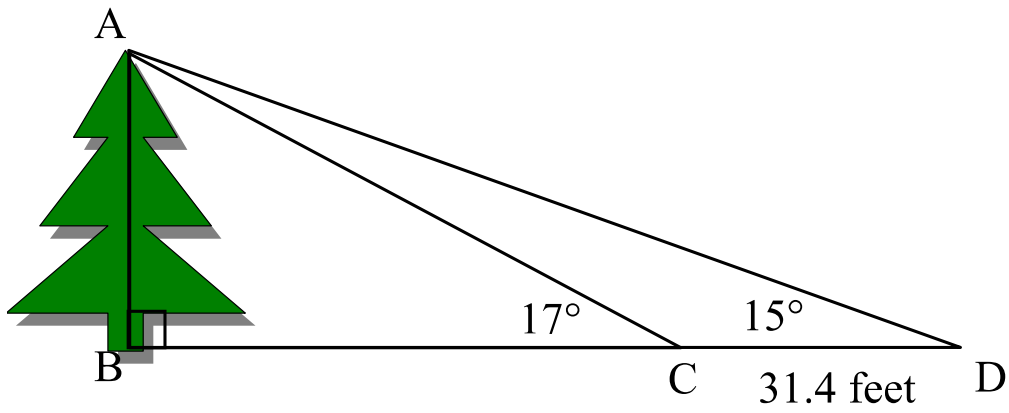# 1.4: Applying the Sine Law

Example #1 Find the height of the tree.

Example #2 A cable car stops part of the way across an 86 m wide gorge. The cable holding the car makes an angle of depression if 57° at one end ad an angle of depression of 40° at the other end. How long is the cable that holds the car? Round your answer to the nearest metre.

Something to think about…

How do we know when we can use the sine law?

If the problem is modeled by right triangle, use the _____ trigonometric ratios.

If the problem is modeled by an acute triangle with _____ _____ and a given _____ or two sides and an opposite _____ , use the _____