

Applied Right Triangle Trigonometry

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Announcements

- 1 Homework in MyOpenMath
- 2 Office hours: M - F, 10am - 11am

Inclinometer Construction

So how do we even measure this angle of elevation thing?

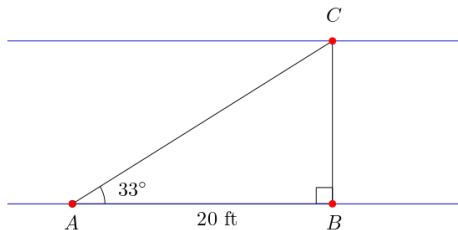
(One) Answer: An inclinometer!

You're going to make your own inclinometer now and we're going to go out and measure some angles and see if we can find the height of some structures on campus.

Demonstration

Applied Problems

You want to measure the distance across a river. To do this, you stand at the point A in the picture below and measure the distance to point B , and the angle made between the lines AC and AB . What is the distance across the river?



Applied Problems

Applied Problems

The ancient greeks were able to measure the radius of the earth pretty accurately using trigonometry. Let's see how they did this. (We'll need: Syrene \rightarrow Alexandria: 5000 stadia (or about 800 km). Length of shadow about .1228 m)