

Project

Due date 11/25/19

Name: _____

Note: No class on Thursday November 14 instead you will work on this project.

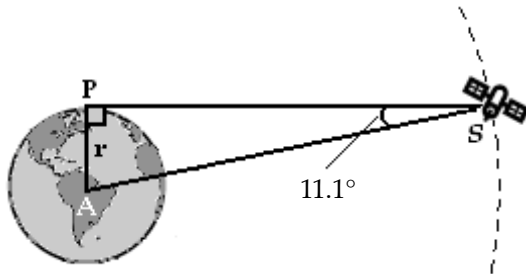
Each question is worth 5 points, your score in this project will be applied to your Exam 2.

Solve the problems 1 and 2 using Trigonometry. Show your work to receive full credit.

- 1) A straight trail with a uniform inclination of 17° leads from a lodge at an elevation of 600 feet to a mountain lake at an elevation of 7500 feet. What is the length of the trail (to the nearest foot)? 1) _____

Solve the problems, show your work to receive full credit.

- 2) A communication satellite is orbiting far above Earth, as shown in the figure. If the radius of Earth is $r = 3960$ miles and the angle at S is 11.1° , how far is the satellite from the surface of the earth (closest to the equator)? Round your answer to the nearest mile.



2) _____