

HAMILTON-WENHAM REGIONAL HIGH SCHOOL
Semester Exam Part II

Directions Where appropriate, give angle measures to the nearest tenth of a degree and side lengths in simplest radical form or to three significant digits.
Show all of your work.

Question Number	Question	Answer
1	After leaving an airport a plane flies for 1.75 hours at a speed of 290 km/h on a course of 204 degrees. Then on a course of 340 degrees the plane flies for 1.5 h at a speed of 250 km/h. At this time, how far from the airport is the plane?	
2	Two hikers are following a trail, which at a certain point, separates into two forks. Each hiker takes a different fork. If the fork diverges at an angle of 62 degrees, and each hiker walks at a speed of 2.25 mi/h, how far apart are the hikers after 3 h?	
3	A triangle has lengths 6, 11, and 11. What is the measure of the largest angle?	
4	A triangle has lengths 10, 16, and 16. What is the measure of the smallest angle?	
5	At a distance of 140 feet, the angle of elevation to the top of a fir tree is 36 degrees. How tall is the tree?	
An Educational Resource by Mr. B		

