Problem of the Week

Number Five

It's time for some applied trigonometry. Give me the exact answer to the problem. No decimal approximations, please! Here we go:

A plane moving at 540 miles per hour is flying towards your home. At one moment the angle formed between the ground and your line of sight to the plane is 30 degrees. One minute later the angle is 45 degrees. Find the altitude of the plane.

FOLLOW THESE INSTRUCTIONS TO THE LETTER:

Please place your name and e-mail address at the top of this page. If you are receiving class credit for participating, please indicate the course number and your professor. Your answer to the problem, coupled with a clear explanation of how you arrived at it, should appear on the back of this page. Be sure to write neatly! If I can't easily read your paper, then I will discard it.

Due **Thursday, March 26** by 5:00 to Jason Rosenhouse in Roop 121. One weekly winner will receive a five dollar gift card to Greenberry's, and will be chosen randomly from among the correct answers.