

Quiz #1. Math 104, Symmetry,
Shape, and Space.

Instructor: Ramin Naimi

Name: _____

Fri 07 Sep 2001

Closed book. Closed Notes. 10 points per problem. Please write very legibly.

1. (a) State the Pythagorean Theorem.
- (b) State the converse of the Pythagorean Theorem.
- (c) Suppose a triangle's sides have lengths 5, 12, and 13 units. Is it a right triangle? Why or why not? Are you using the Pythagorean Theorem or its converse? Explain your reasoning.

2. Find the area of the figure below. Give brief explanations of your work at every step that's appropriate.

3. Draw a parallelogram, and use pictures and words to explain why its area is given by base times height. (You may take for granted that the area of a rectangle is base times height.)