

Name \_\_\_\_\_

Date \_\_\_\_\_ Hour \_\_\_\_\_

Math Analysis & Trig.  
Problem of the week- Due 10-10-2008

Directions: Print out this page and answer the following questions directly on that sheet of paper.

1. (1 point) If  $\sin\theta = \frac{8}{17}$ , find  $\sec\theta$ .

2. (1 point) If  $\cot\theta = 0.8$ , find  $\csc\theta$ .

3. (1 point) Finish the Pythagorean identity.

$\sin^2 x$  \_\_\_\_\_,  $\tan^2 x$  \_\_\_\_\_,  $\csc^2 x$  \_\_\_\_\_

4. (2 points) Simplify:  $\tan x \cos^2 x$ .

5. (2 points) Simplify:  $\frac{\csc\theta}{1 + \cot^2\theta}$ .

6. (2 points) Verify:  $\frac{1 + \tan^2 x}{\csc^2 x} = \tan^2 x$ .

7. (1 point) Write the reciprocals for the following trigonometric functions:

$\sec x \dots$

$\cot x \dots$

$\csc x \dots$