

Name:  
Score:

Math 121 Trigonometry  
MiniTest 2

Read all directions and answer the questions the best that you can. Reasonable work is expected and all answers should be reduced if possible. This contains 55 total points.

Part 1 (10 points)

Given  $\cos \theta = -\frac{12}{13}$  and  $\tan \theta > 0$ , find the remaining trig functions at  $\theta$ . (exact answers only, no decimal approximations)

Part 2 (10 points)

Given an angle  $\alpha$  that has (8, -6) on its terminal side, find all of the trig functions at  $\alpha$ . (exact answers only, no decimal approximations)

Part 3 (2 points each)

Rewrite the expression as a function of a positive acute angle (do not evaluate).

1.)  $\csc 298$

2.)  $\sin \frac{11\pi}{9}$

Part 4 (4 points each)

Evaluate each of the following (exact answers only, no decimal approximations).

1.)  $\sin \frac{4\pi}{3}$

2.)  $\cos 510$

3.)  $\tan 300$

4.)  $\sec \frac{5\pi}{6}$

Part 5 (5 points each)

Sketch the graphs for each of the following. Make sure to label the axes through one whole cycle of the graph.

1.)  $y = 3 \sin(\pi x)$

2.)  $y = -2 \sin(4x)$

3.)  $y = \cos\left(\frac{1}{3}x\right)$