#### NAME:

## BRONX COMMUNITY COLLEGE of the City University of New York DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

### **MTH30**

#### Quiz 3 Sample

# Instructions

Solve all problems and mark your answers clearly. The points for each problem are as indicated. Calculators will NOT be allowed. Use the provided graph paper for the graphing problem. Show all work, using additional paper if needed.

1. (20) If  $\sin \theta = \frac{3}{4}$  find the values of  $\cos \theta$  and  $\tan \theta$ .

2. (20) Find the value of each trigonometric function:  $\cos(\frac{5\pi}{6})$ ,  $\sin(225^{\circ})$ ,  $\tan(\frac{3\pi}{2})$ .

- 3. (10) Find reference angles for the following angles:  $-312^{\circ}, \frac{5\pi}{4}, \frac{11\pi}{6}$ .
- 4. (30) Graph one period of the function  $f(x) = 5\sin(2x \frac{\pi}{2})$ .
- 5. (20) Verify the identity  $\cot x + \tan x = \sec x \csc x$ .