Last Name: _____

First Name: _____

Student ID: _____

Quiz 4

Question 1. *(5 marks)* Find the amplitude, period and displacement of the graph of

$$y = \frac{1}{2}\sin\left(\frac{1}{2}x - \frac{\pi}{4}\right)$$

make a chart of key values in x and y and graph this function.

Question 2. *(4 marks)* Given $\sin\alpha = 4/5$ (α in the first quadrant) and $\cos\beta = -12/13$ (β in the second quadrant) find $\sin(\alpha - \beta)$.

Question 3. *(4 marks)* Use the double angle formula to find $\tan 2x$ if $\sin x = 0.5$ (x in the second quadrant). (Do not use inverse trig functions.)