

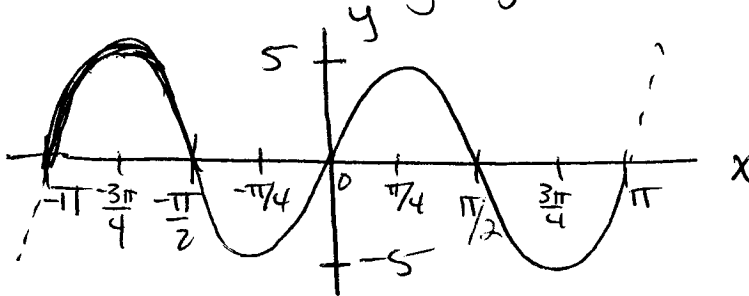
MA111
Test # 4A
Spring 2005

Show all work on your paper. NO WORK = NO CREDIT!
Good luck!

1. Determine the amplitude, period and phase shift of $y = 2 \sin\left(\frac{1}{3}x + \pi\right)$. Sketch the graph of the function. Include all zeros, max's, min's and include at least 2 periods.

2. Sketch at least 2 periods of $y = \tan\left(2x - \frac{\pi}{2}\right)$

3. Find an equation of the form $y = A \sin Bx$ for the following graph.



4. Find the exact value for each of the following:

a) $\tan^{-1}(-1)$ b) $\cos^{-1}(-2)$ c) $\sin^{-1}\left(\sin \frac{5\pi}{4}\right)$