MA-161 (F,07)

Test 1, **Problem 1b, c**

1. Below are parts of graphs of y = sin x and y = arcsin x. (I hope they're what you drew!)

b. On the graph of y = arcsin x, let A be the pont whose x-coordinate is x = –1, and let B be the point whose x coordinate is 1. Tell the exact slope (no decimal approximation) of the line determined by the points A and B.

c. At the point $\left(\frac{\pi}{3}, \frac{\sqrt{3}}{2}\right)$ on the graph of y = sin x, draw carefully the tangent line. (To put this point on your graph, note that $\pi / 3 \approx 1.05$.) Then estimate the slope of the line you drew. You must show what you did to get your estimate.