

Graphing Quiz · Monday October 23, 2006

MATH 111 · Section 7 · Fall 2006

Name _____

Problem 1. Using the space provided, sketch EXACTLY TWO PERIODS of $y = \sin(x)$. Do not change the numbering on the horizontal axis.

Problem 2. Using the space provided, sketch EXACTLY TWO PERIODS of $y = \cos(x)$. Do not change the numbering on the horizontal axis.

Problem 3. Using the space provided, sketch EXACTLY TWO PERIODS of $y = \tan(x)$. Do not change the numbering on the horizontal axis.

Problem 4. Using the space provided, sketch EXACTLY TWO PERIODS of

$$y = 1 + 2 \sin(\pi x/2 - \pi/2).$$

Do not change the numbering on the horizontal axis.

Problem 5. Consider the following data table containing points from a sine function:

x	2	4	6	8	10	12
$f(x)$	7	8	9	8	7	8

Part (a) Sketch a graph of this function.

Part (b) From your graph in part (a), determine the following quantities:

Amplitude:

Average value:

Period:

Phase shift:

Part (c) Using the values you determined in part (c), write an equation of a sine function (in the form $y = a + b \sin(cx + d)$) which models these data.