

Math 141/142 Section B
 Summer 2007 Quiz 3

Name: "Answer Key"

1. Find the amplitude, period, and phase shift of the function

$$y = 3 \cos(\pi x - 2\pi).$$

Graph the function over two periods.

$$y = 3 \cos(\pi(x-2))$$

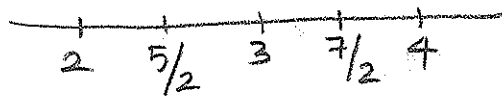
$$A = 3 \leftarrow \text{amplitude}$$

$$w = \pi \Rightarrow T = \frac{2\pi}{w} = \frac{2\pi}{\pi} = 2 \leftarrow \text{period}$$

$$\text{Phase Shift} = \frac{\phi}{w} = 2$$

So we concentrate on the interval $[2, 4]$.

Divide into 4:



x	$y = 3 \cos(\pi x - 2\pi)$
2	3
$5/2$	0
3	-3
$7/2$	0
4	3

