

Verse:

Name:

Date:

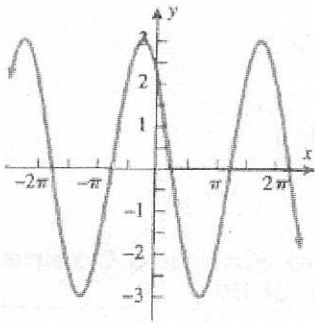
Period:

## Pre-Calculus Quiz #5 (4.4)

1. State the period for  $y = \cos^{3/2} x$ .

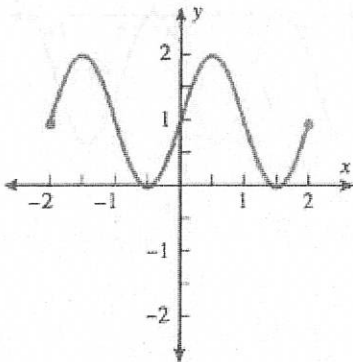
2. If the period =  $\pi/3$ , find B.

3. Write an equation for the following graph:



4. If  $y = \sin(3x + \pi/4)$ , find the phase shift.

5. Find D (the centerline) for the following graph:



6. Which transformation(s) was NOT performed on  $y = \sin x$  to obtain  $y = -2 \sin(3x) + 3$ .  
(may be more than one answer)
- Vertical stretch of 2
  - Vertical shift down 3
  - Horizontal shift  $\pi/9$  to the left
  - Horizontal stretch
7. If the Amplitude is 3, Period is  $\pi/4$ , Phase Shift is  $\pi/2$  to the left, and Vertical shift is 1 down; write an equation for the sine wave.
8. Graph  $y = 4 \sin(6x - \pi) + 1$ . (Make sure to label your axis with the proper scale.)