

**Quiz 5**  
**MTH 13 Section E01**  
**6 April 2017**

Your name:

**Instructions:** Please answer the following and be sure to show your work or support your answer. You are not allowed to use the textbook, workbook, or notes. You cannot talk to other students. You may use your calculator.

1. What is the period of the function  $y = \sin(-\frac{1}{2}x)$ ?

$$\text{Period: } \frac{2\pi}{|-\frac{1}{2}|} = \frac{2\pi}{\frac{1}{2}} \cdot \frac{2}{2} = \underline{\underline{4\pi}}$$

2. Let  $y = -\sin(\frac{1}{2}x - 2\pi)$ . Draw the graph of the given function.

Note that  $y = -\sin\frac{1}{2}x$  has period  $4\pi$ .  $(\frac{2\pi}{|\frac{1}{2}|} = 4\pi)$

$$y = -\sin(\frac{1}{2}x - 2\pi) = -\sin(\frac{1}{2}(x - 4\pi)) \quad \text{we draw}$$

$$y = -\sin\frac{1}{2}x.$$

