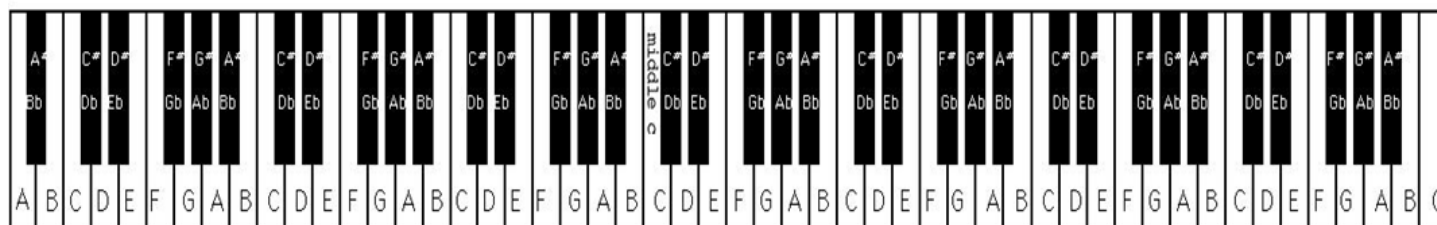


## Math 116: Written Homework Set 11

**This assignment is due on Monday, March 4<sup>th</sup> in class. Show all work where possible! Answers magically appearing will receive no credit.**

- Determine the keyboard letter notes represented by the following integers using the following keyboard:



Entire 88 Note Piano Keyboard with Notes Labeled

- −25
    - −17
    - 5
    - 45
- The fourth B from the left on the piano keyboard is assigned to frequency 246.9 Hz. Find the frequencies of the following notes. Round to the nearest tenth.
    - The frequency of the B three octaves to the left of the fourth B
    - The frequency of the B two octaves to the right of the fourth B
  - The sixth F $\sharp$  from the left on the piano keyboard is assigned to frequency 1480 Hz. Find the frequencies of the following notes. Round to the nearest tenth.
    - The frequency of the F $\sharp$  four octaves to the left
    - The frequency of the F $\sharp$  one octave to the right
  - Suppose a note has a frequency of 196 Hz. Find the frequencies of the notes obtained by moving up the following intervals from this note. Round to the nearest tenth.
    - A third
    - A fourth
    - A fifth
    - A sixth
    - An octave

## **Selected Answers**

1. a. B  
c. F
2. a. 30.9 Hz
3. b. 2960 Hz
- 4 a. 245 Hz  
c. 294 Hz  
e. 392 Hz