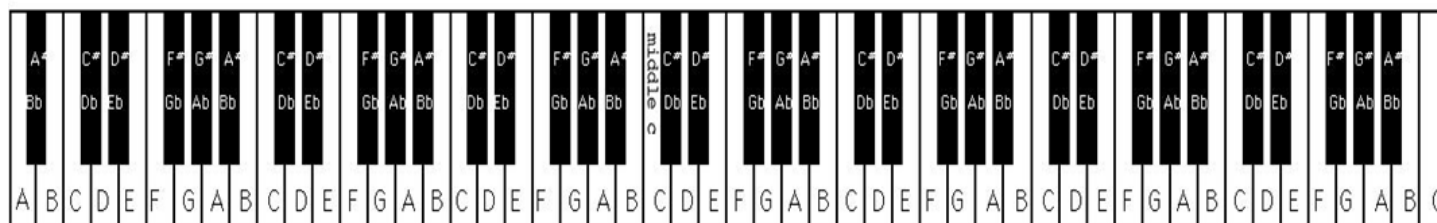


Math 116: Written Homework Set 11

This assignment is due on Thursday, November 30th 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