efinitions

ollowing strings of integers can be

ore octaves apart are equivaise octave contains twelve semiarithmetic modulo 12 (mod 12), in than 0 can be reduced to an integer

ch of the following integers to an

iivalent (mod 12) to each of the fol-

112):

n ):

III. Intervals: Intervals are identified by the number of semitones they contain.

 For each of the following traditional interval names, give the number of semitones in the interval:

a. major third

b. perfect fifth

c. augmented sixth

d. diminished seventh

e. minor ninth

f. major tenth

For each of the following numbers of semitones, give at least one traditional interval name:

a. 4

b. 6

c. 9

d. 11

e. 15

f. 24

IV. Ordered Pitch Intervals: A pitch interval is the interval between two pitches, counted in semitones. + indicates an ascending interval; – indicates a descending interval.

 Construct the following ordered pitch intervals on a musical staff, using middle C as your starting point.

a. +15

b. -7

c. -4

**d.** +23

For the following melodies, identify the ordered pitch interval formed by each pair of adjacent notes.









- V. Unordered Pitch Intervals: An unordered pitch interval is simply the space between two pitches, without regard to the order (ascending or descending) of the pitches.
  - Construct the following unordered pitch intervals on a musical staff, using middle C as the lowest note.
    - a. 15
    - b. 4
    - c. 7
    - d. 11
    - e. 23
  - For the melodies in Exercise IV/2, identify the unordered pitch interval formed by each pair of adjacent notes.
- VI. Ordered Pitch-Class Intervals: A pitch-class interval is the interval between two pitch classes. On the pitch-class clockface, always count clockwise from the first pitch class to the second.
  - For each of the melodies in Exercise IV/2, identify the ordered pitchclass interval formed by each pair of adjacent notes.
  - Which ordered pitch-class intervals are formed by the following ordered pitch intervals?
    - a. +7
    - **b.** -7
    - c. +11
    - d. +13
    - c. l<sub>imi</sub> = terroria e assemble e assemble de la betterra
    - f. -6
- VII. Unordered Pitch-Class Intervals: An unordered pitch-class interval is the shortest distance between two pitch classes, regardless of the order in which they occur. To calculate an unordered pitch-class interval, take the shortest route from the first pitch class to the second, going either clockwise or counterclockwise on the pitch-class clockface.
  - 1. For each of the melodies in Exercise IV/2, identify the unordered pitch-class interval formed by each pair of adjacent notes.

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- 1. For each of the melodie class interval for
- An unordered pitch-clas least three pitch interval:
- VIII. Interval Vector: Any sonority c interval content is usually sho vector. The first number in the of interval class 1; the second n val class 2; and so on.
  - For each of the following content, expressed as an
    - **a.** 0, 1, 3, 4, 6, 7, 9, 10
    - **b.** 0, 2, 4, 6, 8, 10
    - c. 2, 3, 7
    - d. the augmented triad
    - e. the pentatonic scale
    - f. 1, 5, 8, 9
  - For each of the following that it represents.
    - a. 111000
    - b. 004002
    - c. 1111111
    - d. 303630

## Al

- Webern, Symphony Op. 21, The melody organized? What pattern tifying all of the ordered and un Consider not only the intervals I but also the intervals that frame note and the last, between the sec
- II. Schoenberg, Piano Concerto, mn vals or motives that recur? (Hin which also is its highest note, its varied repetitions of this three-nc
- III. Stravinsky, "Musick to heare" fr melody: What patterns of interva first four notes as a basic motivic.