



## STUDY QUESTIONS FOR LESSON 15

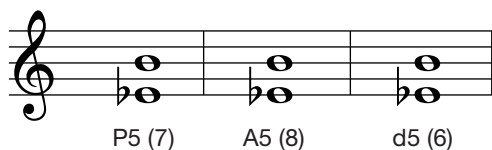
1. Define these terms:
 

augmented interval	doubly augmented interval
diminished interval	doubly diminished interval
double flat	tritone
2. Which interval qualities usually indicate the involvement of a tone from outside the major or minor scale?
3. What do you do to a perfect interval to make it augmented?
4. How are diminished intervals created?
5. Give the procedure for making these interval conversions:
  - P5 → A5
  - P4 → d4
  - m3 → d3
  - M6 → A6
6. Give three ways to describe an interval of half-step size 6.
7. Give an enharmonically equivalent label for these intervals:
  - d5
  - A5
  - m3
  - A6
  - m2
8. Rearrange the intervals in each of these lists so that the half-step sizes get gradually larger, left to right:
  - 1) A5 d5 P5
  - 2) M3 m3 A3 d3
  - 3) A7 m7 M7 d7
  - 4) M2 P4 A2 M3
  - 5) A3 A4 d4 P5
  - 6) d8 d6 d7 A5 A6 A7
9. Which of the white-key fourths or fifths *isn't* perfect quality?
10. What happens to the quality of diminished and augmented intervals after inversion?

## EXERCISES FOR LESSON 15



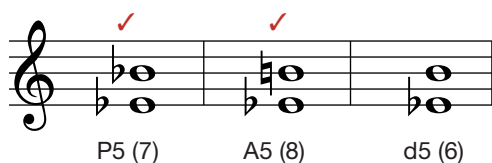
To add appropriate accidentals to the top notes of these intervals . . .



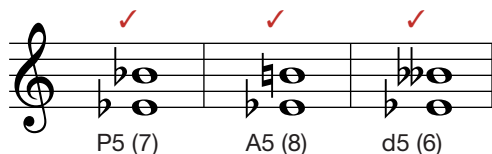
. . . start with the correct spelling of the initial P5. To do this, you need to add a flat to the B in the first measure (Lesson 13):



To make the second measure correct, convert P5 to A5 by raising Bb to B♯:



To make the third measure correct, convert P5 to d5 by lowering Bb to B♭:



In each instance, the bottom note remains unchanged.

- A.** Notate an accidental ( $\sharp$  or  $\times$  or  $\flat$  or  $\flat\flat$  or  $\flat\sharp$ ) for the top note of each interval to make the label correct. Don't change the accidentals for the bottom notes.

1. P5 (7)    2. A5 (8)    3. d5 (6)    4. M3 (4)    5. m3 (3)    6. d3 (2)    7. A3 (5)

8. P4 (5)    9. d4 (4)    10. A4 (6)    11. M6 (9)    12. A6 (10)    13. m6 (8)    14. d6 (7)



Actions on the bottom note of an interval are opposite of actions on the top note. To enlarge (augment), the lower note goes down. To reduce (diminish), the lower note goes up.

M6 (9)    A6 (10)    m7 (10)    d7 (9)

- B.** Notate an accidental ( $\sharp$  or  $\times$  or  $\flat$  or  $\flat\flat$  or  $\flat\sharp$ ) for the bottom note of each interval to make the label correct. Don't change the accidentals for the top notes.

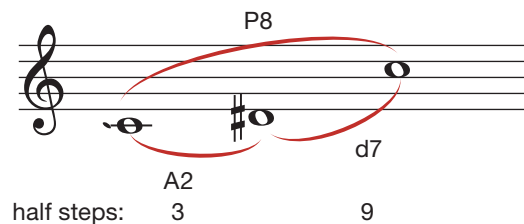
1. P5 (7)    2. d5 (6)    3. A5 (8)    4. m3 (3)    5. d3 (2)    6. M3 (4)    7. A3 (5)

8. P4 (5)    9. A4 (6)    10. d4 (4)    11. M7 (11)    12. A7 (12)    13. m7 (10)    14. d7 (9)



The inversion diagram (Lessons 14.3, 15.6) brings together two inversional partners. The labels of the partners are related in predictable ways:

- quality:* Both are perfect; or  
 one is major and the other is minor; or  
 one is augmented and the other is diminished.
- distance:* The numbers add to nine.
- half steps:* The numbers add to twelve.

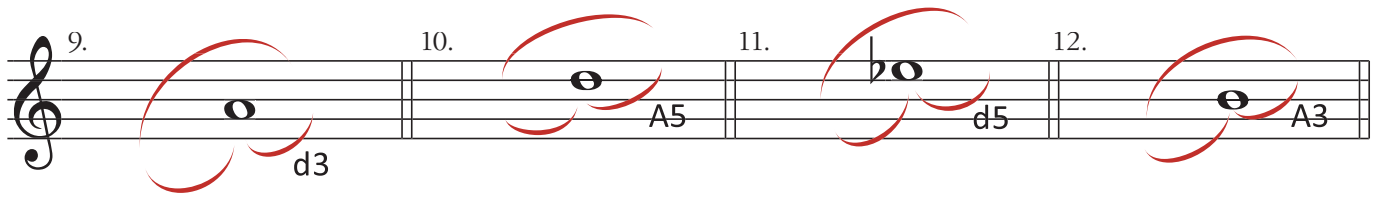


- C.** Add a note or notes and interval labels (quality/distance) to make each inversion diagram complete. In the space beneath each diagram, indicate the half-step size of the two inversionally related intervals. Don't change the accidental of any given note. The first one is done for you.

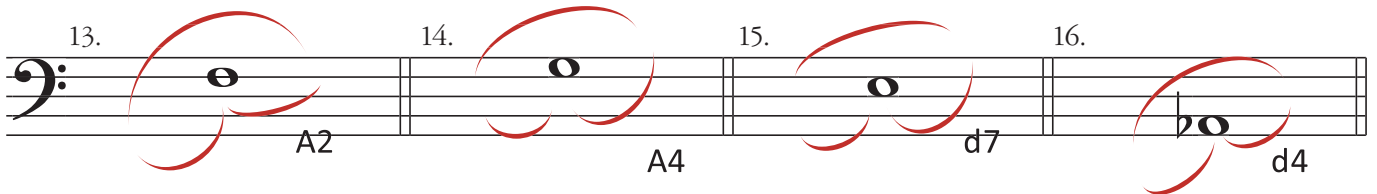
half steps: 6 6      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

half steps: \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

Name: \_\_\_\_\_



half steps: \_\_\_\_\_

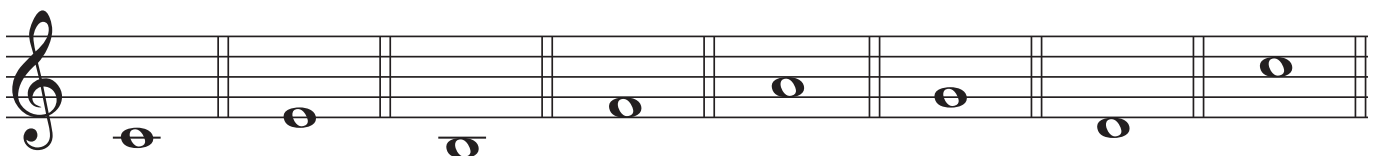


half steps: \_\_\_\_\_



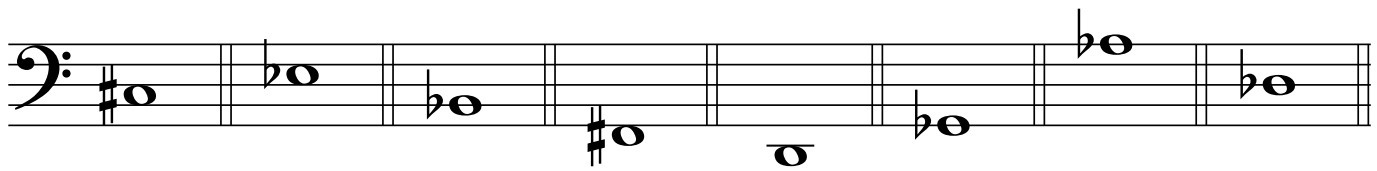
We've learned several methods for spelling intervals above a given note. If the given note is tonic of a familiar major or minor scale, it's probably easiest to use that scale as a point of reference (Lessons 13, 14). If the given note isn't tonic of a familiar major or minor scale, or if other complications arise because of the particular interval you're spelling, it might be easiest to use an inversion diagram (Lessons 14.4, 15.6) or calculate based on half-step size (Lesson 15.5). No matter which method you use, check your work with a different method.

**D.** Add a note above the given note to form the specified interval. Don't change the accidental on the given note.

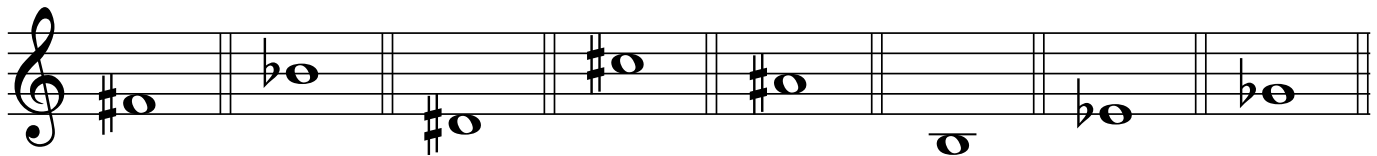


1. A3      2. A4      3. d5      4. A6      5. d7      6. d3      7. A8      8. A2

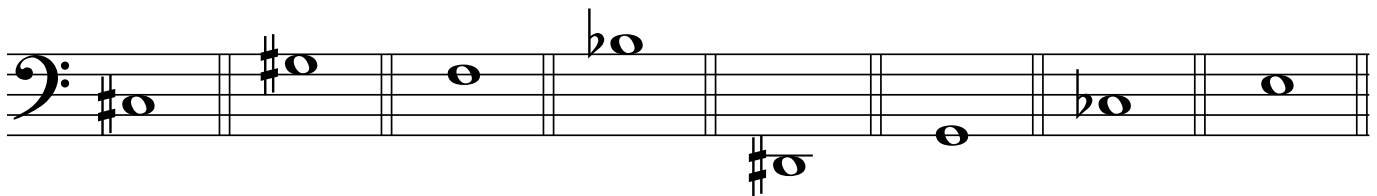
Name: \_\_\_\_\_



9. d7      10. d5      11. A6      12. A5      13. M3      14. m7      15. m3      16. A5

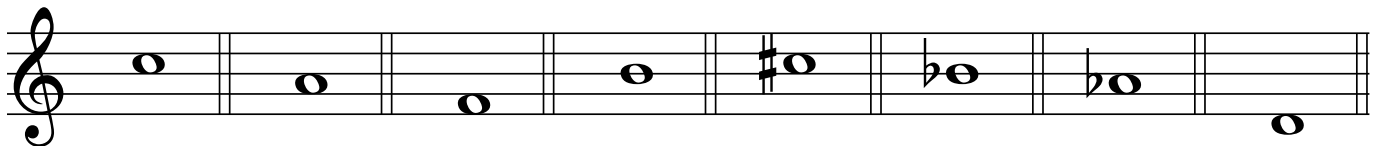


17. A3      18. m2      19. P5      20. d5      21. P4      22. d3      23. d7      24. A3

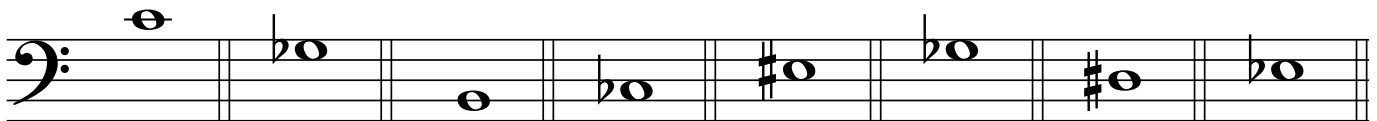


25. A5      26. M3      27. A4      28. d2      29. d5      30. m7      31. M3      32. d4

**E.** Add a note below the given note to form the specified interval. Don't change the accidental on the given note.



1. d5      2. A4      3. d5      4. P4      5. A2      6. d7      7. d4      8. A2



9. A4      10. m6      11. A5      12. d3      13. A7      14. d6      15. M3      16. d7



Here are the names of all the intervals we've learned, in order of increasing half-step size (compare the chart in Lesson 15.4):

	P1	A1	M2	A2	M3	A3	A4	P5	A5	M6	A6	M7	A7
	d2	m2	d3	m3	d4	P4	d5	d6	m6	d7	m7	d8	P8
half-step size:	0	1	2	3	4	5	6	7	8	9	10	11	12

**F.** Label the given intervals (quality/distance, size in half steps). Then rewrite these same intervals (with their labels) in the space to the right but reorder them from smallest half-step size to largest. If intervals have equivalent half-step sizes, order them by distance number. The first one is done for you.

1.

2.

3.

4.

5.

Name: \_\_\_\_\_

6.

7.