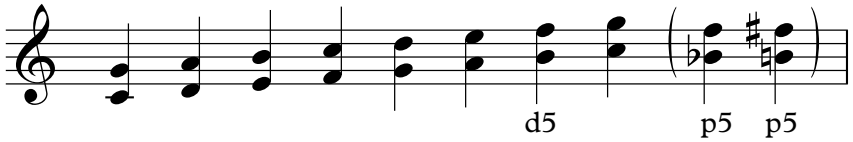
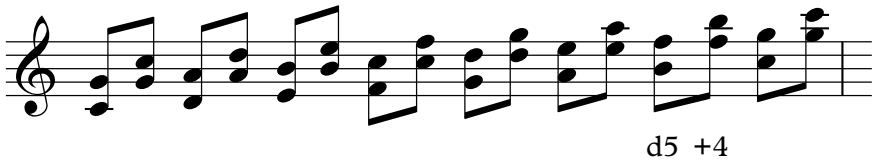
MU 009 (Feurzeig) Keyboard Lab: Intervals

Play all the white-note fifths.
Hear that all the fifths except F-B are perfect and have the same sound **quality**.`

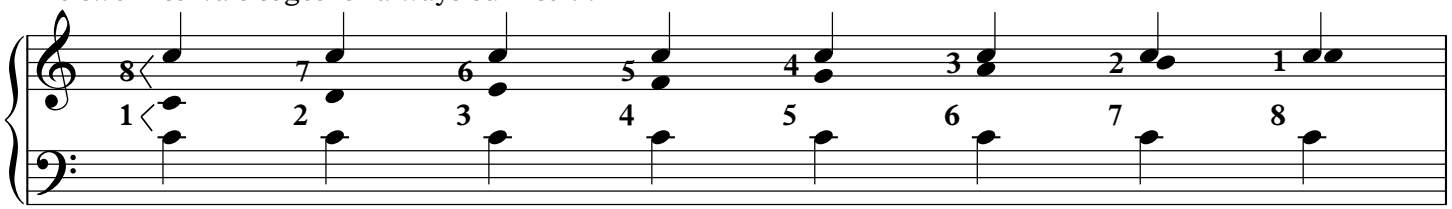
Then "correct" the diminished fifth F-B by substituting first B♭, then F♯. Note that these are also the first flat and the first sharp on the circle of fifths (key signatures).



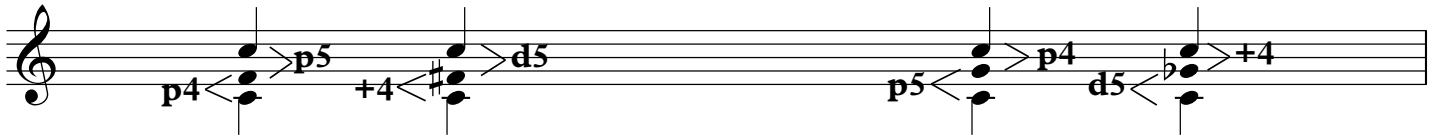
Now invert each fifth in turn to the corresponding white-note fourth. Notice that p5's invert to p4's. Then play the fourths alone, and notice that the F-B fourth stands out from the others—but as augmented, not diminished.



Inversion of interval numbers. Using two hands, play an octave C. Then add notes in the middle going up the scale. Notice that as the interval with the bottom C increases, the interval with the top C decreases. The two intervals together always sum to 9.

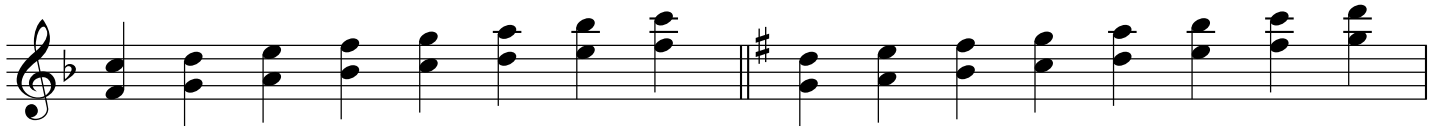


Inversion of interval qualities. Notice that if one interval in an inversion pair expands, its inversion contracts, and the two intervals have complementary qualities (p ↔ p, M ↔ m, aug ↔ dim). As with the successive fifths and fourths you played on the white notes, notice that the small change in interval <u>size</u> from a p5 to dim 5, or from a p4 to aug 4, makes a striking difference in <u>quality</u>.

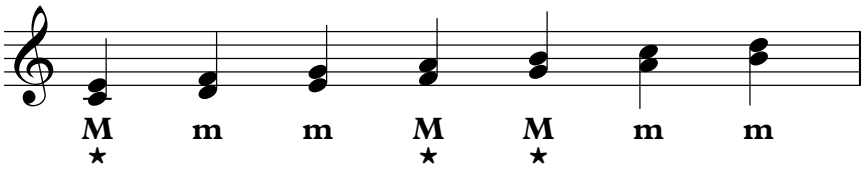


The d5 and +4 are <u>enharmonic equivalents</u>. On the *keyboard*, or on guitar frets, there is no difference between the interval C-F♯ and the interval C-G♭. But in notation and analysis, you need to respect the different spellings and interval labels. Both the d5 and the +4 span 6 half steps; playing them on the piano, out of context and without specified letter names, you can't tell one from the other. The generic name for either the d5 or +4 intervals is the **tritone** (literally "three tones," or three whole steps, i.e. six half steps).

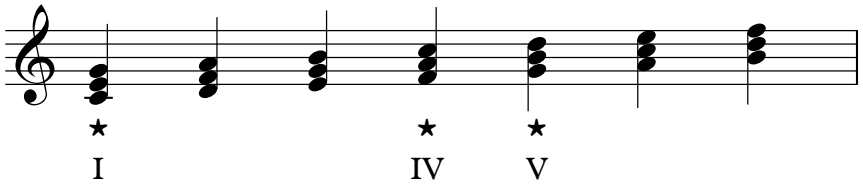
Try transposing the patterns of fifths or fourths to other keys.



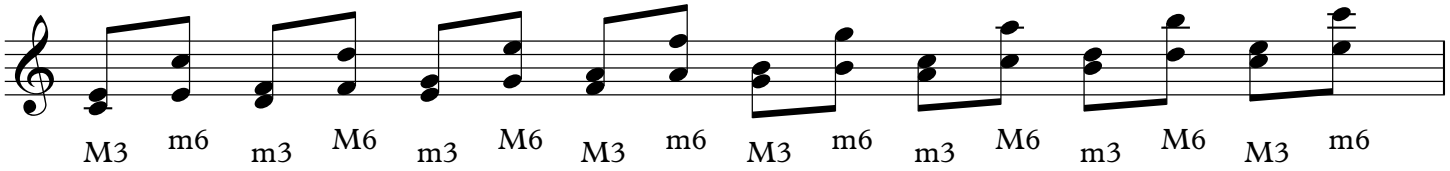
Now play all the white-note thirds. Recall that three are major and four are minor. Listen and focus on hearing the two different qualities.
Relative to the key of C major, the three major thirds are the ones over the tonic, subdominant, and dominant, or scale degrees 1, 4, and 5.



Remember, this correlates with the fact that in major keys, the I, IV, and V chords are major triads.



Now do for white-note thirds what you did for fifths: invert them and compare to the resulting sixths.



Remember:

minor inverts to **major**
perfect inverts to **perfect**
diminished inverts to **augmented**

Focus on a particular interval size (like seconds or thirds) and play different qulaities on the keyboard. Learn to recognize the different interval qualities by ear, both melodically and harmonically.
You can also practice this on teoria.com.