

# יתגדל (Yitgadal) tuning chart

Open strings, all harmonics of low cello C, are diamonds, showing retuning. Small numbers below open strings are the harmonics to which those open strings are tuned (in the simplest octave-equivalent way).

The chart displays the string tunings and harmonics for four instruments: Violin 1, Violin 2, Viola, and Cello. Each instrument's part is shown in a staff with four measures. The first measure of each staff shows the open strings (diamonds) and their corresponding harmonic numbers (small numbers below). The second measure shows the first harmonic (diamond with number below). The third measure shows the second harmonic (diamond with number below). The fourth measure shows the third harmonic (diamond with number below). The notes in the staves are marked with Roman numerals (IV, III, II, I) and accidentals (sharps, flats, naturals) to indicate the pitch of the harmonics. The Cello part includes a change in clef from bass to treble clef in the fourth measure.

Instrument	Measure 1 (Open strings)	Measure 2 (1st Harmonic)	Measure 3 (2nd Harmonic)	Measure 4 (3rd Harmonic)
Violin 1	IV (11), III (17), II (13), I (5)	IV (11), III (17), II (13), I (5)	IV (11), III (17), II (13), I (5)	IV (11), III (17), II (13), I (5)
Violin 2	IV (3), III (1), II (7), I (5)	IV (3), III (1), II (7), I (5)	IV (3), III (1), II (7), I (5)	IV (3), III (1), II (7), I (5)
Viola	IV (7), III (11), II (1), I (3)	IV (7), III (11), II (1), I (3)	IV (7), III (11), II (1), I (3)	IV (7), III (11), II (1), I (3)
Cello	IV (1), III (11), II (1), I (3)	IV (1), III (11), II (1), I (3)	IV (1), III (11), II (1), I (3)	IV (1), III (11), II (1), I (3)

0, 2, 3, 4, 5 are the harmonics of the strings played in the piece. e.g cello IV2 results in a C, III3 is a C# an octave higher. There is no "first" harmonic (it is the open string).