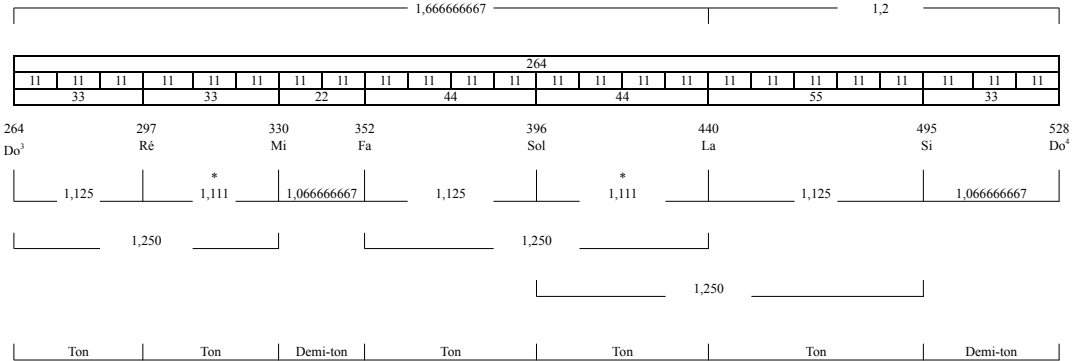


Fig.7a



Gamme diatonique naturel en Hz vs tempérée (%)

Progression naturel Hz entre deux octave/24 = 11 Hz, soit 264/24



10,43 X = b

| | | |
|-------|----|--------|
| 10,43 | 1 | 10,43 |
| 10,43 | 2 | 20,859 |
| 10,43 | 3 | 31,289 |
| 10,43 | 4 | 42 |
| 10,43 | 5 | 52,148 |
| 10,43 | 6 | 62,578 |
| 10,43 | 7 | 73,007 |
| 10,43 | 8 | 83,437 |
| 10,43 | 9 | 93,867 |
| 10,43 | 10 | 104,3 |
| 10,43 | 11 | 114,73 |
| 10,43 | 12 | 125,16 |
| 10,43 | 13 | 135,59 |
| 10,43 | 14 | 146,01 |
| 10,43 | 15 | 156,44 |
| 10,43 | 16 | 166,87 |
| 10,43 | 17 | 177,3 |
| 10,43 | 18 | 187,73 |
| 10,43 | 19 | 198,16 |
| 10,43 | 20 | 208,59 |
| 10,43 | 21 | 219,02 |
| 10,43 | 22 | 229,45 |
| 10,43 | 23 | 239,88 |

11 X =

| | | |
|----|----|-----|
| 11 | 1 | 11 |
| 11 | 2 | 22 |
| 11 | 3 | 33 |
| 11 | 4 | 44 |
| 11 | 5 | 55 |
| 11 | 6 | 66 |
| 11 | 7 | 77 |
| 11 | 8 | 88 |
| 11 | 9 | 99 |
| 11 | 10 | 110 |
| 11 | 11 | 121 |
| 11 | 12 | 132 |
| 11 | 13 | 143 |
| 11 | 14 | 154 |
| 11 | 15 | 165 |
| 11 | 16 | 176 |
| 11 | 17 | 187 |
| 11 | 18 | 198 |
| 11 | 19 | 209 |
| 11 | 20 | 220 |
| 11 | 21 | 231 |
| 11 | 22 | 242 |
| 11 | 23 | 253 |

11,46 X = #

| | | |
|-------|----|--------|
| 11,46 | 1 | 11,458 |
| 11,46 | 2 | 22,917 |
| 11,46 | 3 | 34,38 |
| 11,46 | 4 | 46 |
| 11,46 | 5 | 57,292 |
| 11,46 | 6 | 68,75 |
| 11,46 | 7 | 80,208 |
| 11,46 | 8 | 91,667 |
| 11,46 | 9 | 103,13 |
| 11,46 | 10 | 114,58 |
| 11,46 | 11 | 126,04 |
| 11,46 | 12 | 137,5 |
| 11,46 | 13 | 148,96 |
| 11,46 | 14 | 160,42 |
| 11,46 | 15 | 171,88 |
| 11,46 | 16 | 183,33 |
| 11,46 | 17 | 194,79 |
| 11,46 | 18 | 206,25 |
| 11,46 | 19 | 217,71 |
| 11,46 | 20 | 229,17 |
| 11,46 | 21 | 240,63 |
| 11,46 | 22 | 252,08 |
| 11,46 | 23 | 263,54 |

| | | | | | |
|----------|-------|----|---------|------|----|
| Octave | 10,43 | 24 | 250,311 | Dob | 1 |
| | 10,43 | 25 | 260,74 | | 2 |
| | 10,43 | 26 | 271,17 | | 3 |
| Seconde | 10,43 | 27 | 281,600 | Réb | 4 |
| | 10,43 | 28 | 292,03 | | 5 |
| | 10,43 | 29 | 302,46 | | 6 |
| Tierce | 10,43 | 30 | 312,889 | Mib | 7 |
| | 10,43 | 31 | 323,32 | | 8 |
| Quarte | 10,43 | 32 | 333,748 | Fab | 9 |
| | 10,43 | 33 | 344,18 | | 10 |
| | 10,43 | 34 | 354,61 | | 11 |
| | 10,43 | 35 | 365,04 | | 12 |
| Quinte | 10,43 | 36 | 375,467 | Solb | 13 |
| | 10,43 | 37 | 385,9 | | 14 |
| | 10,43 | 38 | 396,33 | | 15 |
| | 10,43 | 39 | 406,76 | | 16 |
| Sixième | 10,43 | 40 | 417,185 | Lab | 17 |
| | 10,43 | 41 | 427,61 | | 18 |
| | 10,43 | 42 | 438,04 | | 19 |
| | 10,43 | 43 | 448,47 | | 20 |
| | 10,43 | 44 | 458,9 | | 21 |
| Septième | 10,43 | 45 | 469,333 | Sib | 22 |
| | 10,43 | 46 | 479,76 | | 23 |
| | 10,43 | 47 | 490,19 | | 24 |
| Octave | 10,43 | 48 | 500,62 | Dob | 25 |

| | | | | | |
|----------|----|----|-----|-----|----|
| Octave | 11 | 24 | 264 | Do | 1 |
| | 11 | 25 | 275 | | 2 |
| | 11 | 26 | 286 | | 3 |
| Seconde | 11 | 27 | 297 | Ré | 4 |
| | 11 | 28 | 308 | | 5 |
| | 11 | 29 | 319 | | 6 |
| Tierce | 11 | 30 | 330 | Mi | 7 |
| | 11 | 31 | 341 | | 8 |
| Quarte | 11 | 32 | 352 | Fa | 9 |
| | 11 | 33 | 363 | | 10 |
| | 11 | 34 | 374 | | 11 |
| | 11 | 35 | 385 | | 12 |
| Quinte | 11 | 36 | 396 | Sol | 13 |
| | 11 | 37 | 407 | | 14 |
| | 11 | 38 | 418 | | 15 |
| | 11 | 39 | 429 | | 16 |
| Sixième | 11 | 40 | 440 | La | 17 |
| | 11 | 41 | 451 | | 18 |
| | 11 | 42 | 462 | | 19 |
| | 11 | 43 | 473 | | 20 |
| | 11 | 44 | 484 | | 21 |
| Septième | 11 | 45 | 495 | Si | 22 |
| | 11 | 46 | 506 | | 23 |
| | 11 | 47 | 517 | | 24 |
| Octave | 11 | 48 | 528 | Do | 25 |

| | | | | | |
|----------|-------|----|---------|------|----|
| Octave | 11,46 | 24 | 275 | Do# | 1 |
| | 11,46 | 25 | 286,46 | | 2 |
| | 11,46 | 26 | 297,92 | | 3 |
| Seconde | 11,46 | 27 | 309,375 | Ré# | 4 |
| | 11,46 | 28 | 320,83 | | 5 |
| | 11,46 | 29 | 332,29 | | 6 |
| Tierce | 11,46 | 30 | 343,750 | Mi# | 7 |
| | 11,46 | 31 | 355,21 | | 8 |
| Quarte | 11,46 | 32 | 366,667 | Fa# | 9 |
| | 11,46 | 33 | 378,13 | | 10 |
| | 11,46 | 34 | 389,58 | | 11 |
| | 11,46 | 35 | 401,04 | | 12 |
| Quinte | 11,46 | 36 | 412,500 | Sol# | 13 |
| | 11,46 | 37 | 423,96 | | 14 |
| | 11,46 | 38 | 435,42 | | 15 |
| | 11,46 | 39 | 446,88 | | 16 |
| Sixième | 11,46 | 40 | 458,333 | La# | 17 |
| | 11,46 | 41 | 469,79 | | 18 |
| | 11,46 | 42 | 481,25 | | 19 |
| | 11,46 | 43 | 492,71 | | 20 |
| | 11,46 | 44 | 504,17 | | 21 |
| Septième | 11,46 | 45 | 515,625 | Si# | 22 |
| | 11,46 | 46 | 527,08 | | 23 |
| | 11,46 | 47 | 538,54 | | 24 |
| Octave | 11,46 | 48 | 550 | Do# | 25 |

1,66666667

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* Pour plus de détails sur les harmoniques naturels consulter la fig.6b