

'middle' C

A soprano staff with a treble clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 4 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A soprano staff with a treble clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 3 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A soprano staff with a treble clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 2 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

An alto staff with a treble clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 3 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A tenor staff with a treble clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 3 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A bass staff with a bass clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 4 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A bass staff with a bass clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 4 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A bass staff with a bass clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 4 is placed below the note. The text "'middle' C" is centered above the staff.

'middle' C

A soprano staff with a treble clef and a 6/8 time signature. A single quarter note is written on the second line of the staff. A circled number 4 is placed below the note. The text "'middle' C" is centered above the staff.

\version "2.24.3"

% Murray J. MacKENZIE, BSc, CD1
% 22 May 2024

% The Atrium clef glyph is named so as to suggest a pleasant entry space within a larger building.
% The shape of the clef is suggested by the opening passage of Christian BOK'S poem Eunoia:
% "a slapdash arc and a backward zag."

AtriumTWOClef = % Defines an A-clef glyph subscripted two (2) as AtriumTWOClef. An instance of a clefinition.
\markup { \scale #'(0.0167 . 0.0167)
\override #'(filled . #t)
\path #0.001 % WAYPOINTS ; eg: point 108 180 is a waypoint.
#'(moveto 108 180 ; the begin point
curveto 100 172 40 124 18 100 ; inner left point
curveto 16 180 60 265 96 265 ; inner top of figure
curveto 115 265 111 201 111 186 ; deliberate synthetic inflection point, below, to right, and descending past begin point, INNER
curveto 111 0 141 6 141 45 ; the extreme RIGHT of the figure
curveto 141 49 135 49 135 45 ; here begins the mostly 'outer' set of curves of the figure
curveto 132 24 129 20 129 186 ; deliberate synthetic inflection point, below, to right, and ASCENDING past begin point, OUTER
curveto 129 240 129 275 96 275 ; the extreme TOP of figure
curveto 20 275 0 150 0 75 ; the extreme LEFT of figure
curveto 20 75 60 105 108 180 ; Path closure happens to occur.
) \circle \sans \bold \teeny "2"} % Applies circled subscript two (2) to the clef.

AtriumTHREEClef = % Defines an A-clef glyph subscripted two (2) as AtriumTWOClef. An instance of a clefinition.
\markup { \scale #'(0.0167 . 0.0167)
\override #'(filled . #t)
\path #0.001 % WAYPOINTS ; eg: point 108 180 is a waypoint.
#'(moveto 108 180 ; the begin point
curveto 100 172 40 124 18 100 ; inner left point
curveto 16 180 60 265 96 265 ; inner top of figure
curveto 115 265 111 201 111 186 ; deliberate synthetic inflection point, below, to right, and descending past begin point, INNER
curveto 111 0 141 6 141 45 ; the extreme RIGHT of the figure
curveto 141 49 135 49 135 45 ; here begins the mostly 'outer' set of curves of the figure
curveto 132 24 129 20 129 186 ; deliberate synthetic inflection point, below, to right, and ASCENDING past begin point, OUTER
curveto 129 240 129 275 96 275 ; the extreme TOP of figure
curveto 20 275 0 150 0 75 ; the extreme LEFT of figure
curveto 20 75 60 105 108 180 ; Path closure happens to occur.
) \circle \sans \bold \teeny "3"} % Applies circled subscript two (2) to the clef.

AtriumFOURClef = % Defines an A-clef glyph subscripted two (2) as AtriumTWOClef. An instance of a clefinition.
\markup { \scale #'(0.0167 . 0.0167)
\override #'(filled . #t)
\path #0.001 % WAYPOINTS ; eg: point 108 180 is a waypoint.
#'(moveto 108 180 ; the begin point
curveto 100 172 40 124 18 100 ; inner left point
curveto 16 180 60 265 96 265 ; inner top of figure
curveto 115 265 111 201 111 186 ; deliberate synthetic inflection point, below, to right, and descending past begin point, INNER
curveto 111 0 141 6 141 45 ; the extreme RIGHT of the figure
curveto 141 49 135 49 135 45 ; here begins the mostly 'outer' set of curves of the figure
curveto 132 24 129 20 129 186 ; deliberate synthetic inflection point, below, to right, and ASCENDING past begin point, OUTER
curveto 129 240 129 275 96 275 ; the extreme TOP of figure
curveto 20 275 0 150 0 75 ; the extreme LEFT of figure
curveto 20 75 60 105 108 180 ; Path closure happens to occur.
) \circle \sans \bold \teeny "4"} % Applies circled subscript two (2) to the clef.

% The Barra clef glyph is named after the isle of Barra in the Hebrides and also the land near Grand Narrows in Cape Breton.
% The resemblance to a 'flat' glyph is difficult to avoid while also avoiding things that look like a K-clef.
% Better designs for a b-clef are encouraged.

BarraTHREEClef = % Defines a B-clef glyph subscripted three (3) as BarraTHREEClef. An instance of a clefinition.
\markup \concat { \scale #'(0.0167 . 0.0167)
% \override #'(filled . #t)
\path #6
#'(moveto 30 180 ; a begin point
curveto 45 186 51 210 72 210 ; clockwise OUTER curve to TOP of CURVES
curveto 144 210 120 90 6 90 ; descending to mast step
curveto 39 90 90 102 90 180 ; ascending INNER to inner right point
curveto 90 210 40 185 30 180 ; upper INNER limb counter-clockwise curve back to begin point

moveto 0 330
lineto 0 90
lineto 6 90 ; bottom of step
lineto 6 330 ; top of mast
lineto 30 330 ; maintruck RIGHT of masthead
lineto 30 324 ; maintruck second striation from top (begin)
lineto 6 324 ; maintruck second striation from top (end at left)

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lineto 6 318 ; maintruck third striation from top (begin)
lineto 30 318 ; maintruck third striation from top (end at right)
lineto 30 321 ; maintruck intermediate striation (begin)
lineto 12 321 ; maintruck intermediate striation (just in from left)
lineto 12 90 ; mast completion at bottom of maststep

moveto 30 330 ; begin halyard at mast top
lineto 30 30 ; bottom end of halyard
)) \circle \sans \bold \teeny "3"}

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% I found an SVG graphic of this kind of d-clef created by Dr. Alex HELLSTEN (mathes, FINLAND) and distributed
% using a creative commons license (www.creativecommons.org/licences/by/4.0). What I've re-created here is
% a single-filled-loop version of the shape which has a lacuna where the indexed staveline crosses the gudgeon.
% I've called this form of the clef "Delian" after Delia DERBYSHIRE (MA, mathes & music, ENGLAND) who first realized
% the music of the BBC Doctor WHO theme. Dr. HELLSTEN may want to more specifically name it or its variants himself.
DelianFOURClef = % Defines a D-clef glyph subscripted four (4) as DelianFOURClef. An instance of a clefinition.

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\markup \concat { \scale #'(0.0167 . 0.0167) % scaling factor ~ 1/60
\override #'(filled . #t)
\path #1
#'( (moveto 120 181 ; the begin point 'outer curve' from just above the inner line point central within the gudgeon
lineto 111 201 ; initial short line up and to the left
curveto 90 180 20 190 20 222 ; 'outer' upper curve of the gudgeon; mostly right-to-left
lineto 20 300 ; up 78
curveto 20 312 10 312 0 312 ; upper inner seraph, ascending
lineto 0 330 ; up 18
lineto 51 330 ; right 51 atop the clef
curveto 180 330 180 210 180 180 ; descending BIG OUTER CURVE; upper limb
curveto 180 150 180 30 51 30 ; descending BIG OUTER CURVE; lower limb
lineto 0 30 ; left 51 along bottom of clef
lineto 0 48 ; up 18
curveto 10 48 20 48 20 60 ; lower inner seraph, ascending
lineto 20 138 ; up 78
curveto 20 170 90 180 111 159 ; 'outer' lower curve of the gudgeon; mostly left-to-right
lineto 120 179 ; of 'outer curve', semi-final deliberate 'ALMOST curve-closing' up and towards the right
lineto 133 179 ; horizontal line-of-gap bottom-of-gap
curveto 133 179 121 138 121 129 ; 'inner' cap-curve of gudgeon, descending down to the left
curveto 117 150 51 162 51 144 ; 'inner' lower long-curve of gudgeon; mostly right-to-left
lineto 51 60 ; down 84
curveto 51 48 51 48 63 48 ; inner lower SMALL curve descending left to right
curveto 120 48 150 120 150 180 ; ascending lower limb of BIG INNER CURVE
curveto 150 240 120 312 63 312 ; ascending upper limb of BIG INNER CURVE
curveto 51 312 51 312 51 300 ; inner lower SMALL curve descending right to left
lineto 51 216 ; down 84
curveto 51 198 117 210 121 231 ; 'inner' upper long-curve of gudgeon; mostly left-to-right
curveto 121 228 133 179 133 181 ; of 'inner curve', semi-final deliberate 'ALMOST curve-closing' down and towards the right
lineto 120 181 ; overall curve closing horizontal line-of-gap top-of-gap
))
\fontsize#0 \sub \circle \bold "4"}

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% I designed and engineered this clef myself.
% The name of this clef in this font is Eu Echo with the notion that E-clefs are eu-clefs.
% The spelling of "eu" is the same as the extant French past participle of avoir (avoir ~~~~ to have).
% I had sought words more fulminous in sophistication and much later realized that this simplest E-word "eu" was the best.
% The font title suffix Echo is meant to suggest that this (in-fact) initial design is an improvement perhaps
% beyond other earlier designs and that some other person(s) might happen in turn to make a design which is better than suffixed Echo.
EuEchoFOURClef = % Defines an E-clef glyph subscripted four (4) as EuEchoFOURClef. An instance of a clefinition.

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\markup \concat { \scale #'(0.0167 . 0.0167)
\override #'(filled . #t)
\path #6
#'( (moveto 120 180 ; a begin point
curveto 0 105 18 315 108 315 ; ascending INNER curve to INNER UPPER point
curveto 123 315 156 315 171 282 ; ascending INNER curve to tip of upper prong
curveto 144 360 33 360 9 240 ; descending OUTER curve, upper limb to point NEAR THE LEFT
curveto 0 210 9 90 120 180 ; descending OUTER curve, upper MIDDLE LIMB as return to begin point

moveto 120 180 ; a begin point
curveto 0 249 9 45 105 45 ; descending INNER curve to INNER BOTTOM point
curveto 120 45 165 45 183 90 ; ascending INNER curve to tip of bottom prong, extreme RIGHT point
curveto 150 0 0 0 0 120 ; ascending OUTER curve, BOTTOM LIMB to extreme LEFT point
curveto 0 135 0 240 120 180 ; ascending OUTER curve, lower MIDDLE LIMB to begin point

moveto 48 248
lineto 48 93
)) \circle \sans \bold \teeny "4"}

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\score { % for an A-clef on A4: AtriumFOURClef DEMO

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\new Staff \with {
  \override Clef.stencil = #(lambda (grob) (grob-interpret-markup grob AtriumFOURClef))
  clefPosition = #-6
  middleCPosition = #-5
}

\absolute

{ \time 6/8
  c'^\markup{"'middle' C"}
}

\score {
  % for an A-clef on A3:  AtriumTHREEClef DEMO
  \new Staff \with {
    \override Clef.stencil = #(lambda (grob) (grob-interpret-markup grob AtriumTHREEClef))
    clefPosition = #-6
    middleCPosition = #2
  }
}

\absolute

{ \time 6/8
  c'^\markup{"'middle' C"}
}

\score {
  % for an A-clef on A2:  AtriumTWOCLef DEMO
  \new Staff \with {
    \override Clef.stencil = #(lambda (grob) (grob-interpret-markup grob AtriumTWOCLef))
    clefPosition = #-6
    middleCPosition = #9
  }
}

\absolute

{ \time 6/8
  c'^\markup{"'middle' C"}
}

\score {
  % for a B-clef:  BarraTHREEClef DEMO
  \new Staff \with {
    \override Clef.stencil = #(lambda (grob) (grob-interpret-markup grob BarraTHREEClef))
    clefPosition = #-6
    middleCPosition = #1
  }
}

\absolute

{ \time 6/8
  c'^\markup{"'middle' C"}
}

\score {
  % for the C-clef:  a 'generic' DEMO
  \new Staff
}

\absolute

{ \clef C \time 6/8
  c'^\markup{"'middle' C"}
}

\score {
  % for a D-clef:  DelianFOURClef DEMO
  \new Staff \with {
    \override Clef.stencil = #(lambda (grob) (grob-interpret-markup grob DelianFOURClef))
    clefPosition = #-6
    middleCPosition = #-1
  }
}

\absolute

{ \time 6/8
  c'^\markup{"'middle' C"}
}

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}
\score {
\new Staff \with {
\override Clef.stencil = #(lambda (grob) (grob-interpret-markup grob EuEchoFOURClef))
clefPosition = #-6
middleCPosition = #-2
}
\absolute
{ \time 6/8
c'^\markup{"'middle' C"}
}
\score {
\new Staff
\absolute
{ \clef F \time 6/8
c'^\markup{"'middle' C"}
}
\score {
\new Staff
\absolute
{ \clef G \time 6/8
c'^\markup{"'middle' C"}
}
}

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