

# Signs Spanning Numbers

Some characters in Arabic script are signs that span (or enclose) numbers, such as U+06DD End of Ayah and U+0605 Number Mark Above:



## Spanning sign examples

Over time these have been variously called:

- *prepended concatenation marks*
- *subtending marks*
- *prefixed format control characters*

For the purposes of this document, we will use the term *spanning signs* (or more simply, *signs*) to refer to these characters and *sign glyphs* for the glyphs within the font that will represent them.

Since digit choice is dependent on regional use, these marks may be used with European digits (U+0030..U+0039), ARABIC-INDIC digits (U+0660..U+0669) or with EXTENDED ARABIC-INDIC digits (U+06F0..U+06F9).

Many applications are able to display these properly, just by typing the spanning signs (such as U+06DD *end of ayah*) before the digit(s). This will not work unless your application is set up to handle complex scripts.

Occasionally some applications may require the following hack:

- precede the entire sequence (spanning sign plus following digits) with
  - 202D LEFT-TO-RIGHT OVERRIDE *or*
  - 202E RIGHT-TO-LEFT OVERRIDE
- follow the entire sequence with U+202C POP DIRECTIONAL FORMATTING.

Exactly which of these might work depends on your application.

From a practical standpoint there isn't a need to support an arbitrary-length sequence of digits. For SIL fonts, we have found the maximum number of digits as documented in the following table to be sufficient for most uses.

Examples of how these appear are shown below using varying numbers of digits with *hamza* used as a separator.

Characters	Glyph	max # digits
0600 ARABIC NUMBER SIGN	١٢٣٤٥٦٧٨٩٠	3
0601 ARABIC SIGN SANAH (year sign)	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	4
0602 ARABIC FOOTNOTE MARKER	١٢٣٤٥٦٧٨٩٠	2
0603 ARABIC SIGN SAFHA	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	4
0604 ARABIC SIGN SAMVAT	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	4
0605 ARABIC NUMBER MARK ABOVE	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	4
0890 ARABIC POUND MARK ABOVE	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	4
0891 ARABIC PIASTRE MARK ABOVE	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	4
06DD ARABIC END OF AYAH	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	3
08E2 ARABIC DISPUTED END OF AYAH	١٢٣٤٥٦٧٨٩٠١٢٣٤٥٦٧٨٩٠	3

For more Unicode information about these characters, see *Signs Spanning Numbers* in [Section 9.2](#) and *Prepended Concatenation Marks* in [Section 23.2](#) of The Unicode Standard.

This guide is from the [font-arab-tools project](#) and is copyright © 2022-2024 SIL Global.