

**Proposal to add Roman Numerals Alternate Number Fours**

**Eduardo Marín Silva (nobody\_uses@outlook.com)**

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I am proposing to add the alternate forms of Roman Numeral Four in U+218E in the Number Forms block.

1 Introduction. The roman empire had its own system of numerals that was in fact reusing the same symbols for the letters, so naturally Unicode just unified each symbol and sequence with their corresponding codepoints in the Basic Latin block, however in version 5.0 of the standard it was requested the addition of Roman numerals to be in parity with the ARIB standard.

The reason of why this was necessary in the first place is that in vertical text a number like **III** could take less space since otherwise you would either need to rotate each I individually which looks unnatural or have the numeral take three times more vertical space. But encoding them has had serendipitous benefits, one can make software recognize unambiguously if a given sequence are letters or have numerical value, and furthermore since the use of the numerals is normally related to clock-faces, it allows to tell the time in a unique way without having to change fonts.

2 Alternate Four. If one is a bit observant one would notice that clock faces not always contain the **IV** glyph, but instead it is a glyph composed of four I's, the reason for this choice is not certain, but it is attested in some original roman sources. Nevertheless, the existence of such glyph forces us to consider how to represent in Unicode. One would be tempted to consider it a variation of U+2163, but that is not viable since each character contains a different decomposition and so the stability of associated data would be compromised.

3 Entries.

**U+218E IIII ROMAN NUMERAL ALTERNATE FOUR**

≈ 0049 I 0049 I 0049 I 0049 I

**U+218F iiiii SMALL ROMAN NUMERAL ALTERNATE FOUR**

≈ 0069 i 0069 i 0069 i 0069 i

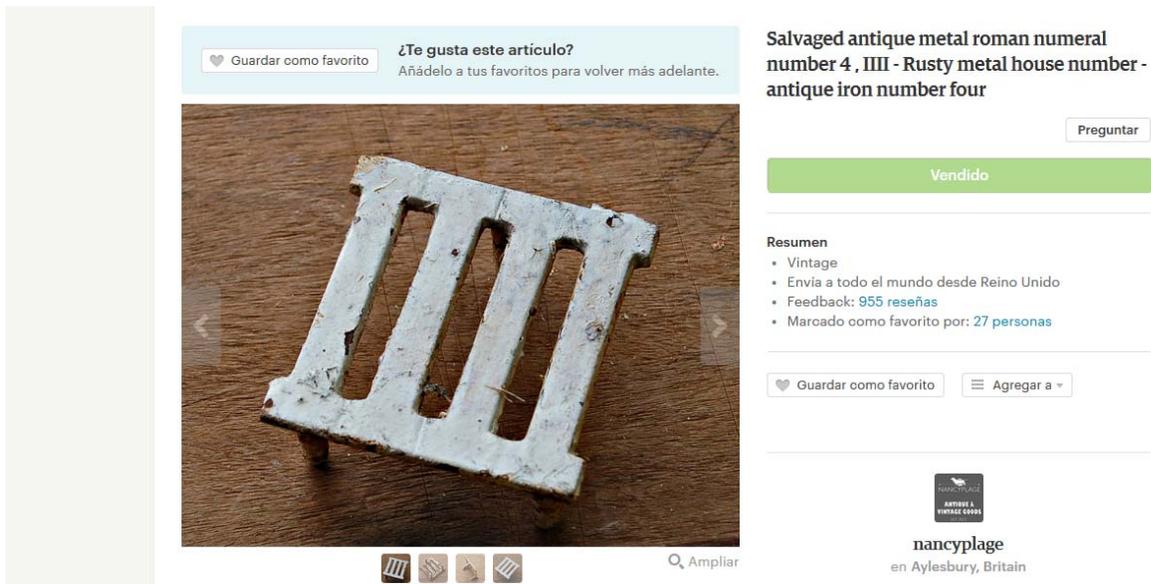
Note that the second numeral is not necessary since it is not attested, but it is desirable to at least consider for future inclusion.

4 Character properties.

218E;ROMAN NUMERAL ALTERNATE FOUR;NI;0;L;<compat> 0049 0049 0049 0049;;;4;N;;;218F;

218F;SMALL ROMAN NUMERAL ALTERNATE FOUR;NI;0;L;<compat> 0069 0069 0069 0069;;;4;N;;;218E;;218E

5 Attestations.



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Guardar como favorito

Salvaged antique metal roman numeral number 4 , IIII - Rusty metal house number - antique iron number four

Preguntar

Vendido

Resumen

- Vintage
- Envía a todo el mundo desde Reino Unido
- Feedback: [955 reseñas](#)
- Marcado como favorito por: [27 personas](#)

Guardar como favorito

Agregar a

nancyplage  
en Aylesbury, Britain

Ampliar

Figure 1. Roman alternate numeral four in physical form.



Figure 2. The same numeral in a clock named Kaufmann's clock, located in the corner of Smithfield Street and Fifth Avenue



Figure 3. Old 24 hour clock showing alternate number four in several places



Figure 4. Entryway number 54 in the Coliseum written LIIII



Figure 4. Modern wristwatch showing the alternate four

Sources (in order of appearance):

<https://www.etsy.com/listing/165547598/salvaged-antique-metal-roman-numeral>

<http://mathtourist.blogspot.mx/2010/08/iiii-versus-iv-on-clocks.html>

<http://www.artofmanliness.com/2014/08/27/even-when-not-in-romeyou-should-know-your-roman-numerals/>

<https://threesixty360.wordpress.com/2011/01/01/roman-numerals-not-quite-so-simple/>

<http://forums.watchuseek.com/f62/tissot-le-locle-question-1064468.html>

In Pittsburgh, for example, the ornate Kaufmann's clock (above) at the corner of Smithfield Street and Fifth Avenue, shows IIII instead of IV.

There are [many stories](#) about why IIII appears so often as a replacement for IV on clocks but [no definitive explanation](#). The tradition apparently has a long history and may even go back to sundials.

Example of the numeral in discussion.

(from source 2)

kind of see all four Is after the L. Apparently, according to [our usual font of knowledge](#), the reluctance to use IV is because that was the standard abbreviation for Jupiter's name in Rome (IVPPTER), and this mixture of sometimes using four symbols in a row continued for more than a thousand years: in the 1390 English cookbook *The Forme of Cury* ([here on Project Gutenberg](#)) the author still uses IIII [as in the Table of Contents, where Section IIII is *rapes in potage*] and there are also some IV for section numbers and references to Edward, though those might be later additions.

And even 100 years ago [last year, in 1910], the Admiralty Arch in London uses MDCCCCX instead of MCMX in the inscription

ANNO : DECIMO : EDWARDI :  
SEPTIMI : REGIS :  
: VICTORIÆ : REGINÆ : CIVES :  
GRATISSIMI : MDCCCCX :



*(In the tenth year of King Edward VII, to Queen Victoria, from most grateful citizens, 1910).*

So what does all this mean? Nothing much, except that Roman Numeral Rules were maybe not quite as hard and fast as I once believed.

Another example. Note that no numerals higher

than 12 are suitable for encoding unless they are not compositions, so the special case of the 4 C's can be handled by existing characters. (from source 4)