

The Hindu-Arabic Numerals

European Digit	0	1	2	3	4	5	6	7	8	9
Devanāgarī Digit	०	१	२	३	४	५	६	७	८	९
East Arabic Digits	٠	١	٢	٣	٤	٥	٦	٧	٨	٩
Arabic Variant					۴	۵	۶			

Unfortunately, I do not have unicode fonts containing West Arabic digits. These are closer to the European digits. Below are some more variations in my unicode font.

European Digit	0	1	2	3	4	5	6	7	8	9
Mongolian Digit	᠐	ᠠ	ᠡ	ᠢ	ᠣ	ᠤ	ᠬ	ᠬ	ᠬ	ᠬ
Tibetan Digit	༠	༡	༢	༣	༤	༥	༦	༧	༨	༩
Thai Digit	๐	๑	๒	๓	๔	๕	๖	๗	๘	๙

Abjad Numerals

Before, and alongside the Hindu-Arabic numerals, Arabic writers use a system based on Arabic letters. This system is very similar to the Greek Ionian system. It is based on the old order of letters called the *Abjad order*. Today Arabic letters are ordered in a different way based partly on similarity of form.

In addition, Hebrew numerals are based on Hebrew letters. The close similarity between the Arabic system and the earlier Hebrew system is apparent in the table below. In both systems letters and numerals are

written right to left.

Note: The term *abjad* is sometimes used for a writing system that represents consonants, while an *alphabet* is used for a writing system that represents vowels and consonants. Others use *alphabet* for both types. Also note, Arabic does use letters to indicate *long* vowels.

ā <i>or</i> ,	'alif	ا	1		'	alef	א	1
b	bā'	ב	2		b, bh	bet	ב	2
ğ <i>or</i> j	ğīm (jīm)	ג	3		g, gh	gimel	ג	3
d	dāl	ד	4		d, dh	dalet	ד	4
h	hā'	ה	5		h	he	ה	5
w, ū	wāw	ו	6		v, w	vav	ו	6
z	zāy	ז	7		z	zayin	ז	7
ḥ	ḥā'	ח	8		ḥ, kh	khet	ח	8
ṭ	ṭā'	ט	9		ṭ	tet	ט	9
y, ī	yā'	י	10		y	yod	י	10
k	kāf	כ	20		k, kh	kaf	כ	20

ذ or ḏh	zā'	ظ	900			(tsadi)	𐤆 or 𐤇 or 𐤅	900
ġ or gh	ġayn	غ	1000					

In Russia and some other Slavic nations, the Cyrillic alphabet was used for numerals in a system based on the Ionic numeral system. Peter the Great replaced it with the Hindu-Arabic numeral system in the 1700s.

(Developed 2005-2006 by Professor Wayne Aitken for Math 330).