Thirty years ago, my article “Cardinal Transposals” appeared in the November 1975 Word Ways. That article presented transposals for the numbers ONE to TWENTY, and then in tens THIRTY to NINETY (omitting EIGHTY). Since then, no other transposal material has appeared for the cardinal numbers TWENTY ONE and upwards. (In May and August 2003, Rex Gooch presented words from which multiple cardinal numbers can be extracted, as ONE, SIX, TEN, SIXTY and SIXTY ONE from XYLOSTEIN, but this is a different kind of wordplay.)

We haven’t identified single-word transposals for these cardinals—what we have done is identify a set of words which taken together represent a transposal of those cardinals. For example, TWENTY ONE can be transposed to TEENY TOWN. Higher cardinals can be similarly transposed to sets of two words. A few examples:

- THIRTY TWO worthy fit
- FIFTY SEVEN iffy events
- SIXTY SEVEN sexist envy
- SEVENTY EIGHT hey vignettes
- EIGHTY NINE hinting eye
- ONE HUNDRED rounded hen
- NINE HUNDRED nun hindered
- ONE HUNDRED TWELVE hoveled underwent

THREE THOUSAND southern death
- THIRTEEN THOUSAND unthroned atheist
- FIFTY THOUSAND dainty shutoff
- NINETY THOUSAND ELEVEN unheavenly detentions
- ONE MILLION nil oinomel
- ONE DECILLION ONE loonie indolence
- ONE QUINDECILLION colonel quinidine
- SIXTY CENTILLION silly extinction

In composing this article, I developed transposals for thousands of cardinals, most of which have not been used in this article. There are probably many better (and even shorter!) ones than those I have come up with. Inevitably, some of the solutions offered here may not be optimal. If readers are able to offer improvements, please submit them to the editor.

A series of questions follow about the minimum number of words required for transposals of cardinal names. As the structure of cardinal names changes dramatically at one million and above, answers are offered for cardinals both below and above one million.

**Below One Million**

What is the highest (largest) cardinal which can be transposed to two words?
The highest (largest) cardinal transposable to two words seems to be ONE HUNDRED THOUSAND to UNDERHANDED HOUSTON.

What are the lowest and highest cardinals requiring three words?
Lowest: ONE HUNDRED SEVENTEEN to UNEVEN SHORTENED NEED.
Highest: NINE HUNDRED NINETY EIGHT THOUSAND ONE to UNSHUNNED NINE-TIETH DEHYDROGENATION.
What are the lowest and highest cardinals requiring four words?
Lowest: SIX HUNDRED SIXTY SIX to HID SEXIST SYRINX DUX.
Highest: NINE HUNDRED NINETY NINE THOUSAND NINETY to UNTHINNED INNU-ENDO THYNNIDAE TRESINNEY.

What are the lowest and highest cardinals requiring five words?
Lowest: TWENTY THOUSAND TWO HUNDRED TWENTY TWO to DOWNTOWN UNTESTED HEYDAY NEWTON TRUTH.
Highest: NINE HUNDRED NINETY NINE THOUSAND NINE HUNDRED to UNTHINNED NINHYDRIN UREDINEAE SHUNNED TENDON.

Above One Million

What is the highest (largest) cardinal which can be transposed to two words?
It appears to be SEVEN HUNDRED CENTILLION to HENDERSONVILLE INunctED.

What are the lowest and highest cardinals requiring three words?
Lowest: ONE MILLION FOURTEEN to NONE OF ILMENORUTILE.
Highest: NINE HUNDRED NINETY EIGHT CENTILLION to INTENTLY UNENLIGHTENED ENCHIRIDION.

What are the lowest and highest cardinals requiring four words?
Lowest: ONE MILLION ONE HUNDRED FIFTEEN to FONDLE UNTOLD FEMININE HEROINE.
Highest: NINE HUNDRED NINETY NINE CENTILLION EIGHTY to UNDYINGLY CHINE INTENTIONED INNERLEIThen.

What are the lowest and highest cardinals requiring five words?
Lowest: I don’t know—this is a challenge for the reader.
Highest: NINE HUNDRED NINETY NINE CENTILLION ELEVEN TRILLION to THINLY INTERNECINE INNUEndo TRILINOlenIN NEVELLED.

Year Transposals

All cardinals from 1900 to 1999 can be transposed to three or four words (none to two words). For example, 1900 transposes to HONEST UNDERHANDED UNION, 1950 to UNINTENDED FROTHY UNFASHIONED, and 1999 to UNDERNEATH DENOTE NINNYISH INNUEndO.

The present year, 2005, transposes to FAVE UNWITHSTOOD. The first year after 2000 that requires three words is 2012, which transposes to DEVOUT WEALTH TOWNS. The first year after 2000 that requires four words is 2117, which transposes to DEVOUT HOTHEAD UNDERWENT NONSENSE.

All words are in Webster’s Third except for oinomel, trilinolenin, unshunned, unthinned in Webster’s Second. Tresinney (Cornwall, England) is in the Geographica Great Britain Road Atlas; Innerleithen (Peebleshire, Scotland) is in Bartholomew’s Gazetteer of the British Isles; Hendersonville NC is in Webster’s Geographical Dictionary.