

This brainteaser was written by Derrick Niederman.

Algebra exercises often ask students to "Find *n*." But you won't find *n* in this brainteaser!

Create an equation of the form c = ab such that:

- when written out in English, none of the numbers *a*, *b*, or *c* contain the letter *n*
- *a*, *b*, and *c* are all integers
- *c* has the largest value possible



Solution: $2 \times 44 = 88$.

The following number words do not contain an n:

TWO	SIX	FORTY
THREE	EIGHT	FIFTY
FOUR	TWELVE	SIXTY
FIVE	THIRTY	EIGHTY

It's also possible to combine these words to make others without n, such as THIRTY-FIVE and SIXTY-THREE. But there are no others: all numbers words greater than one-hundred contain an n. (Think about it. The words *hundred*, *thousand*, *million*, *billion*, and so on, all have an n in them.)

Of the possible numbers that can be made from the list above, the greatest is EIGHTY-EIGHT. Luckily, both TWO and FORTY-FOUR can also be made, so $2 \times 44 = 88$ is the equation we're looking for.