AZERTY & QWERTZ KEYBOARDS

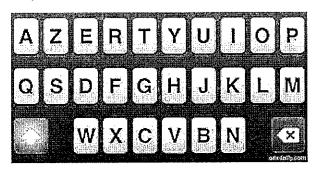
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Previous editions of Word Ways have identified the longest words and names which can be typed on each of the individual rows of a standard QWERTY keyboard. For example, PROTEROTYPE is one of the longest words which can be typed on the QWERTYUIOP row of a standard keyboard; FLAGFALLS is one of the longest words which can be typed on the ASDFGHJKL row; and BZZZBZZZ is the longest word which can be typed on the ZXCVBNM row.

But how do things change when using other keyboard layouts? Here I'll examine two alternative keyboard layouts — the AZERTY and QWERTZ keyboards.

The AZERTY Keyboard

AZERTY is a specific layout for the characters of the Latin alphabet on typewriter keys and computer keyboards. The layout takes its name from the first six letters to appear on the first row of alphabetical keys. It is modelled on the English QWERTY layout. It is used by most French speakers based in Europe. Here is the layout of the AZERTY keyboard, ignoring most of the non-letter keys:



The differences compared to the more familiar QWERTY keyboard are these:

- A and Z replace Q and W on the top row;
- Q replaces A on the second row;
- M moves to the second row from the third (bottom) row;
- W replaces Z on the third (bottom) row.

What does this mean for the longest words typable on each row? The top row now has all of the vowels, but only three potentially useful consonants, P, R and T. The second and third rows now look decidedly clunky, containing only consonants.

The AZERTYUIOP row

Here are the longest words which can be typed on the top row:

15 letters

AUTOPORTRAITURE (W2)

13 letters

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PROPRIETARIAT (W3) PROPRITIATORY (W2) REAPPROPRIATE (W3)
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12 letters

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APPROPRIATOR (W3) AUTOPORTRAIT (W2) PREPITUITARY (W2)

PRETTYPRETTY (Century Dictionary 1889)

PROPITIATORY (W3) PROTOTRAITOR (W2) PYROTARTRATE (W2)

REPROPITIATE (W2) TAPPIETOORIE (W3) TETRAPARTITE (W2)
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11 letters

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ITEROPARITY (OED)
APPROPRIATE (W3)
                   ITATARTRATE (W2)
                   PERPETRATOR (W3) PERPETUATOR (W3)
PARATROOPER (W3)
PORTRAITURE (W3)
                   PREOPERATOR (W2)
                                     PREPARATORY (W3)
                                      PROPITIATOR (W3)
PRIORITIZER (Wiktionary)
                                     PROPRIETORY (W3)
PROPRIATORY (W2)
                   PROPRIETARY (W3)
                   REPATRIATOR (Collins 2015)
PROTEROTYPE (W3)
TETRAZOTIZE (W3)
                   TRITURATURE (W2)
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In the list above, the two italicised words can also be typed on the top row (QWERTYUIOP) of the QWERTY keyboard. (Dictionary sources are indicated by: W2, Webster's Second Edition; W3, Webster's Third Edition; OED, the Oxford English Dictionary)

The QSDFGHJKLM row

On the second row of the AZERTY keyboard, the number of available words which can be typed is severely limited by the absence of vowels. The longest examples appear to be these:

6 letters

SHSHSH (OED)

4 letters

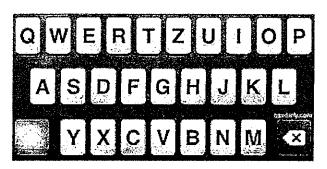
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MMMM (OED) SHHH (Collins English Dictionary, 2015)
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The WXCVBN row

On the bottom row of keys, there aren't any dictionary-listed words. But there are plenty of abbreviations (such as BBC), Roman numerals (such as CCCXXXV), symbols for the chemical elements (such as Nb), and call signs for US radio and television stations (such as WXCW).

The QWERTZ Keyboard

The QWERTZ keyboard is a slight tweak on the tried-and-tested QWERTY layout. It is used predominately in central Europe (Germany, Austria, the Czech Republic, and other nearby nations). Here is the letter arrangement of the QWERTZ keyboard, ignoring most of the non-letter keys:



Some implementations of the QWERTZ keyboard have additional accented letters to cope with the nuances of various European languages – for example, a U-umlaut ($\ddot{\mathbf{U}}$) at the rightmost end of the top row; and an O-umlaut ($\ddot{\mathbf{O}}$) and an A-umlaut ($\ddot{\mathbf{A}}$) at the rightmost end of the second row. I shall ignore these additional accented letters for the sake of keeping things simple.

The differences compared to the more familiar QWERTY keyboard are these:

- Z replaces Y on the top row;
- Y replaces Z on the bottom row.

The longest words which can be typed on the QWERTZ top row are almost the same as those which can be typed on the QWERTY top row – except that any of the long QWERTY words using a Y (such as PRETTYPRETTY and PROTEROTYPE) are no longer typable on the QWERTZ top row. The longest word typable with the newly-positioned Z is the 10-letter TERRORIZER (W2) – but this was typable, anyway, on the AZERTY keyboard top row.

As the second row of the QWERTZ keyboard is identical to that of the QWERTY keyboard (ie the keys ASDFGHJKL), no different words can be typed.

The third row of the QWERTZ keyboard gains the letter Y (and loses the Z). The longest words typable on the bottom row are: MYNNY (an early spelling of 'minnie', in the OED), NYNNY (a 16th century spelling of 'ninny', in the OED), MYNY (an early spelling of the verb 'mine', in the OED), NYM (W2) and NYX (W2).

Footnote: the longest word common to the top row of the three keyboards QWERTY, AZERTY and QWERTZ can only use the letters ERTUIOP. Examples include these 10-letter specimens:

PIROUETTER

POURRITURE

PROPRIETOR

REPERTOIRE

REPETITEUR

There's more information about AZERTY and QWERTZ keyboards at:

mentalfloss.com/article/52483/6-non-gwerty-keyboard-layouts