

## Regular Expression Cheat Sheet

Metacharacters are the building blocks of regular expressions. Characters in RegEx are understood to be either a metacharacter with a special meaning or a regular character with a literal meaning.

Metacharacter	Description
\	Specifies the next character as either a special character, a literal, a back reference, or an octal escape.
^	Matches the position at the beginning of the input string.
\$	Matches the position at the end of the input string.
*	Matches the preceding subexpression zero or more times.
+	Matches the preceding subexpression one or more times.
?	Matches the preceding subexpression zero or one time.
{n}	Matches exactly n times, where n is a non-negative integer.
{n,}	Matches at least n times, n is a non-negative integer.
{n,m}	Matches at least n and at most m times, where m and n are non-negative integers and n <= m.
.	Matches any single character except "n".
[xyz]	A character set. Matches any one of the enclosed characters.
x y	Matches either x or y.
[^xyz]	A negative character set. Matches any character not enclosed.
[a-z]	A range of characters. Matches any character in the specified range.
[^a-z]	A negative range characters. Matches any character not in the specified range.
b	Matches a word boundary, that is, the position between a word and a space.
B	Matches a nonword boundary. 'erB' matches the 'er' in "verb" but not the 'er' in "never".
d	Matches a digit character.
D	Matches a non-digit character.
f	Matches a form-feed character.

<b>n</b>	Matches a newline character.
<b>r</b>	Matches a carriage return character.
<b>s</b>	Matches any whitespace character including space, tab, form-feed, etc.
<b>S</b>	Matches any non-whitespace character.
<b>t</b>	Matches a tab character.
<b>v</b>	Matches a vertical tab character.
<b>w</b>	Matches any word character including underscore.
<b>W</b>	Matches any non-word character.
<b>un</b>	Matches n, where n is a Unicode character expressed as four hexadecimal digits. For example, u00A9 matches the copyright symbol