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| **Subexpression** | **Matches** |
| ^ | Matches beginning of line. |
| $ | Matches end of line. |
| . | Matches any single character except newline. Using m option allows it to match newline as well. |
| [...] | Matches any single character in brackets. |
| [^...] | Matches any single character not in brackets |
| \\A | Beginning of entire string |
| \\z | End of entire string |
| \\Z | End of entire string except allowable final line terminator. |
| re\* | Matches 0 or more occurrences of preceding expression. |
| re+ | Matches 1 or more of the previous thing |
| re? | Matches 0 or 1 occurrence of preceding expression. |
| re{ n} | Matches exactly n number of occurrences of preceding expression. |
| re{ n,} | Matches n or more occurrences of preceding expression. |
| re{ n, m} | Matches at least n and at most m occurrences of preceding expression. |
| a|b | Matches either a or b. |
| (re) | Groups regular expressions and remembers matched text. |
| (?: re) | Groups regular expressions without remembering matched text. |
| (?> re) | Matches independent pattern without backtracking. |
| \\w | Matches word characters. |
| \\W | Matches nonword characters. |
| \\s | Matches whitespace. Equivalent to [\t\n\r\f]. |
| \\S | Matches nonwhitespace. |
| \\d | Matches digits. Equivalent to [0-9]. |
| \\D | Matches nondigits. |
| \\A | Matches beginning of string. |
| \\Z | Matches end of string. If a newline exists, it matches just before newline. |
| \\z | Matches end of string. |
| \\G | Matches point where last match finished. |
| \\n | Back-reference to capture group number "n" |
| \\b | Matches word boundaries when outside brackets. Matches backspace (0x08) when inside brackets. |
| \\B | Matches nonword boundaries. |
| \\n, \\t, etc. | Matches newlines, carriage returns, tabs, etc. |
| \\Q | Escape (quote) all characters up to \\E |
| \\E | Ends quoting begun with \\Q |

Regular-Expression Examples

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| **Example** | **Description** |
| . | Match any character except newline |
| [Rr]uby | Match "Ruby" or "ruby" |
| rub[ye] | Match "ruby" or "rube" |
| [aeiou] | Match any one lowercase vowel |
| [0-9] | Match any digit; same as [0123456789] |
| [a-z] | Match any lowercase ASCII letter |
| [A-Z] | Match any uppercase ASCII letter |
| [a-zA-Z0-9] | Match any of the above |
| [^aeiou] | Match anything other than a lowercase vowel |
| [^0-9] | Match anything other than a digit |
| \\d | Match a digit: [0-9] |
| \\D | Match a nondigit: [^0-9] |
| \\s | Match a whitespace character: [ \t\r\n\f] |
| \\S | Match nonwhitespace: [^ \t\r\n\f] |
| \\w | Match a single word character: [A-Za-z0-9\_] |
| \\W | Match a nonword character: [^A-Za-z0-9\_] |
| ruby? | Match "rub" or "ruby": the y is optional |
| ruby\* | Match "rub" plus 0 or more ys |
| ruby+ | Match "rub" plus 1 or more ys |
| \\d{3} | Match exactly 3 digits |
| \\d{3,} | Match 3 or more digits |
| \\d{3,5} | Match 3, 4, or 5 digits |
| \\D\\d+ | No group: + repeats \\d |
| (\\D\\d)+/ | Grouped: + repeats \\D\d pair |
| ([Rr]uby(, )?)+ | Match "Ruby", "Ruby, ruby, ruby", etc. |