Expression: a/b\*c-d$e

|  |  |  |
| --- | --- | --- |
| **INFIX** | **OPERATORSTACK** | **POSTFIX** |
|  | empty |  |
| a | empty | a |
| / | / | a |
| b | / | ab |
| \* | \* | ab/ |
| c | \* | ab/c |
| - | - | ab/c\* |
| d | - | ab/c\*d |
| $ | -,$ | ab/c\*d |
| e | -,$ | ab/c\*de |
|  | - | ab/c\*de$ |
|  | empty | **ab/c\*de$-** |

Expression: (p\*q)/(r+s) -u+v

|  |  |  |
| --- | --- | --- |
| **INFIX** | **OPERATORSTACK** | **POSTFIX** |
|  | empty |  |
| ( | ( |  |
| p | ( | p |
| \* | (,\* | p |
| q | (,\* | pq |
| ) | empty | pq\* |
| / | / | pq\* |
| ( | /,( | pq\* |
| r | /,( | pq\*r |
| + | /,(,+ | pq\*r |
| s | /,(,+ | pq\*rs |
| ) | / | pq\*rs+ |
| - | - | pq\*rs+/ |
| u | - | pq\*rs+/u |
| + | + | pq\*rs+/u- |
| v | + | pq\*rs+/u-v |
|  | empty | **pq\*rs+/u-v+** |

Expression: a\*(b\*(c\*(d+e)))

|  |  |  |
| --- | --- | --- |
| **INFIX** | **OPERATORSTACK** | **POSTFIX** |
|  | empty |  |
| a | empty | a |
| \* | \* | a |
| ( | \*,( | a |
| b | \*,( | ab |
| \* | \*,(,\* | ab |
| ( | \*,(,\*,( | ab |
| c | \*,(,\*,( | abc |
| \* | \*,(,\*,(,\* | abc |
| ( | \*,(,\*,(,\*,( | abc |
| d | \*,(,\*,(,\*,( | abcd |
| + | \*,(,\*,(,\*,(,+ | abcd |
| e | \*,(,\*,(,\*,(,+ | abcde |
| ) | \*,(,\*,(,\* | abcde+ |
| ) | \*,(,\* | abcde+\* |
| ) | \* | abcde+\*\* |
|  | empty | **abcde+\*\*\*** |

Expression: (a+(b\*(c\*d)))+(e+f)-g

|  |  |  |
| --- | --- | --- |
| **INFIX** | **OPERATORSTACK** | **POSTFIX** |
|  | empty |  |
| ( | ( |  |
| a | ( | A |
| + | (,+ | A |
| ( | (,+,( | A |
| b | (,+,( | Ab |
| \* | (,+,(,\* | ab |
| ( | (,+,(,\*,( | ab |
| c | (,+,(,\*,( | abc |
| \* | (,+,(,\*,(,\* | abc |
| d | (,+,(,\*,(,\* | abcd |
| ) | (,+,(,\*,( | Abcd\* |
| ) | (,+,(,\* | Abcd\* |
| ) | (,+,(, | Abcd\*\* |
| ) | (,+ | Abcd\*\* |
| ) | ( | Abcd\*\*+ |
| ) | empty | Abcd\*\*+ |
| + | + | Abcd\*\*+ |
| ( | +,( | Abcd\*\*+ |
| e | +,( | Abcd\*\*+e |
| + | +,(,+ | Abcd\*\*+e |
| f | +,(,+ | Abcd\*\*+ef |
| ) | +,( | Abcd\*\*+ef+ |
| ) | + | Abcd\*\*+ef+ |
| - | - | Abcd\*\*+ef++ |
| g | - | Abcd\*\*+ef++g |
|  | empty | **Abcd\*\*+ef++g-** |

Expression: (a+b)/(d-e)

|  |  |  |
| --- | --- | --- |
| **INFIX** | **OPERATORSTACK** | **POSTFIX** |
|  | empty |  |
| ( | ( |  |
| a | ( | A |
| + | (,+ | A |
| b | (,+ | Ab |
| ) | ( | Ab+ |
| ) | empty | Ab+ |
| / | / | Ab+ |
| ( | /,( | Ab+ |
| d | /,( | Ab+d |
| - | /,(,- | Ab+d |
| e | /,(,- | Ab+de |
| ) | /,( | Ab+de- |
| ) | / | Ab+de- |
|  | empty | **Ab+de-/** |

Expression: (b$2-4\*a\*c)/(2\*a)

|  |  |  |
| --- | --- | --- |
| **INFIX** | **OPERATORSTACK** | **POSTFIX** |
|  | empty |  |
| ( | ( |  |
| b | ( | B |
| $ | (,$ | B |
| 2 | (,$ | B2 |
| - | (,- | B2$ |
| 4 | (,- | B24 |
| \* | (,-,\* | B24 |
| a | (,-,\* | B24a |
| \* | (,-,\* | B24a\* |
| c | (,-,\* | B24a\*c |
| ) | (,- | B24a\*c\* |
| ) | ( | B24a\*c\*- |
| ) | empty | B24a\*c\*- |
| / | / | B24a\*c\*- |
| ( | /,( | B24a\*c\*- |
| 2 | /,( | B24a\*c\*-2 |
| \* | /,(,\* | B24a\*c\*-2 |
| a | /,(,\* | B24a\*c\*-2a |
| ) | /,( | B24a\*c\*-2a\* |
| ) | / | B24a\*c\*-2a\* |
|  | empty | **B24a\*c\*-2a\*/** |