

Valid Expressions

1) Addition:

Enter an arithmetic expression:

$3+4$

Result: 7.0

2) Subtraction with parenthesis:

Enter an arithmetic expression:

$8-(5-2)$

Result: 5.0

3) Multiplication and Division:

Enter an arithmetic expression:

$10*2/5$

Result: 4.0

4) Exponentiation:

Enter an arithmetic expression:

$2**3$

Result: 8.0

5) Mixed Operators:

Enter an arithmetic expression:

$4*(3+2)\%7-1$

5.0

Invalid Expressions

1) Unmatched Parenthesis:

Enter an arithmetic expression:

$2 * (4 + 3 - 1$

Error: (line 1, column 2):

unexpected "("

expecting "**"

2) Operators Without Operands:

Enter an arithmetic expression:

$* 5 + 2$

Error: (line 1, column 1):

unexpected "**"

expecting white space, "(" or digit

3) Incorrect Operator Usage:

Enter an arithmetic expression:

$4 / 0$

Result: Infinity

4) Missing Operator:

Enter an arithmetic expression:

5 (2 + 3)

Error: (line 1, column 2):

unexpected "2"

expecting operator or end of input

<interactive>:2:1: error:

- Non type-variable argument in the constraint: Num (t1 -> t2)
(Use FlexibleContexts to permit this)
- When checking the inferred type
it :: forall {t1} {t2}. (Num t1, Num (t1 -> t2)) => t2

5) **Invalid Characters:**

Enter an arithmetic expression:

7 & 3

<interactive>:1:2: **error:**

Variable not in scope: (&) :: t0 -> t1 -> t

6) **Mismatched Parenthesis:**

Enter an arithmetic expression:

((3 + 4) - 2) + (1)

Error: (line 1, column 15):

unexpected end of input

expecting white spaces, operator, "+", "-" or ")"

7) **Invalid Operator Usage:**

Enter an arithmetic expression:

((5 + 2) / (3 * 0))

Result: Infinity

8) **Invalid Operator Sequence:**

Enter an arithmetic expression:

((2 -) 1 + 3)

Error: (line 1, column 5):

unexpected "-"

expecting space or "***"

9) **Missing Operand:**

Enter an arithmetic expression:

((4 * 2) + (-))

Error: (line 1, column 16):

unexpected ")"

expecting space, white space, "(" or digit

10) **Invalid Characters:**

Enter an arithmetic expression:

((7 * 3) ^ 2)

Error: (line 1, column 10):
unexpected "^"
expecting space, operator, white space or ")"