20SCS2050 - Quiz 17(10 Points)

5 * x - 3 / 8 in pre-order notation

(1 Point)

* 5 x - 3 8

* 5 x - 8 3
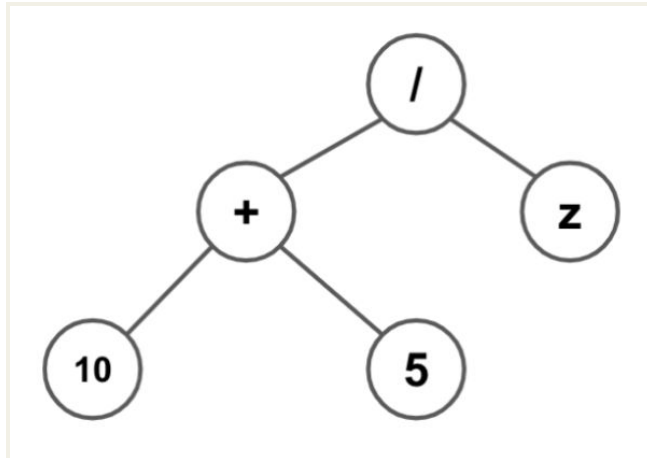
* - / 5 x 3 8

/ - * 5 x 3 8

Expression that matches the tree

(1 Point)

10 / 5 + z

10 / z + 5

10 + z / 5

An expression tree can have internal nodes with only one child if the operator is unary.

(1 Point)

false

When parsing an input queue, the addRecursively method in an expression tree reaches the base case when ...

(1 Point)

the input queue is empty OR the term read is an operator

the input queue is empty OR the term read is an operand

the term read is an operator

the term read is an operand

The leaves of an expression tree always contain

(1 Point)

operands

operators

expressions

null values

The internal nodes of an expression tree always contain

(1 Point)

operands

operators

expressions

null values

The left or right subtrees of an expression tree are also expression trees

true

false

8

An expression tree is a type of

binary tree

linked list

array

scalar

9

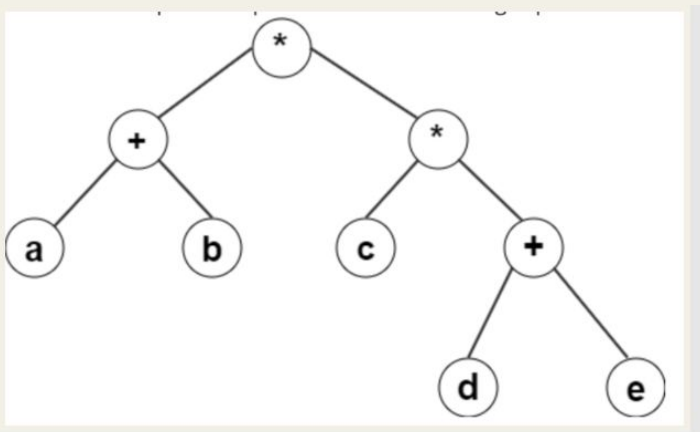Best order to create an expression tree

pre-order

in-order

post-order

disorder

10

Post-order of the expression tree

(1 Point)

a b c d e + + * *

a b c + d e + * *

a b c d + * e + *