QUIZIZZ

NAME : _____

CLASS : _____

unit-4 test-1
20 Questions

DATE : _____

1. In a binary tree a node (vertex) can only have one child.

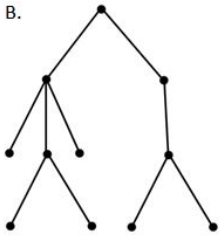
A True

B False

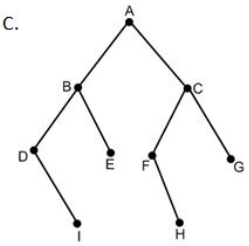
2. Which are binary trees?

A.

B.



C.

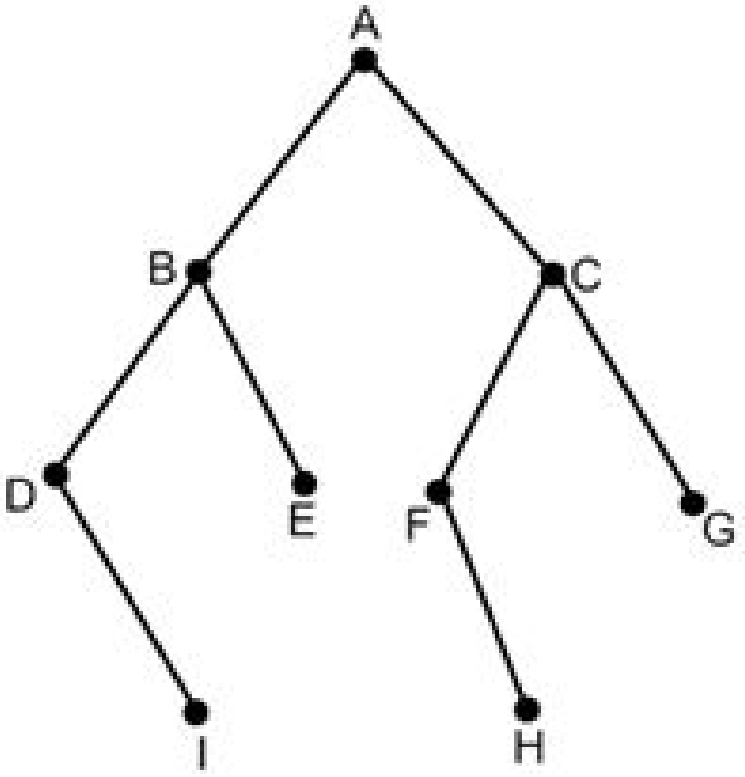


A A,B

B B,C

C A,C

3. Which vertex is the root?



A A

B E

C C

D I

4. Draw a binary tree where A is the parent of B and C, B is a parent of D and E, E is a parent of F. G and H are children of C, and I and J are children of H.
On what level is J?

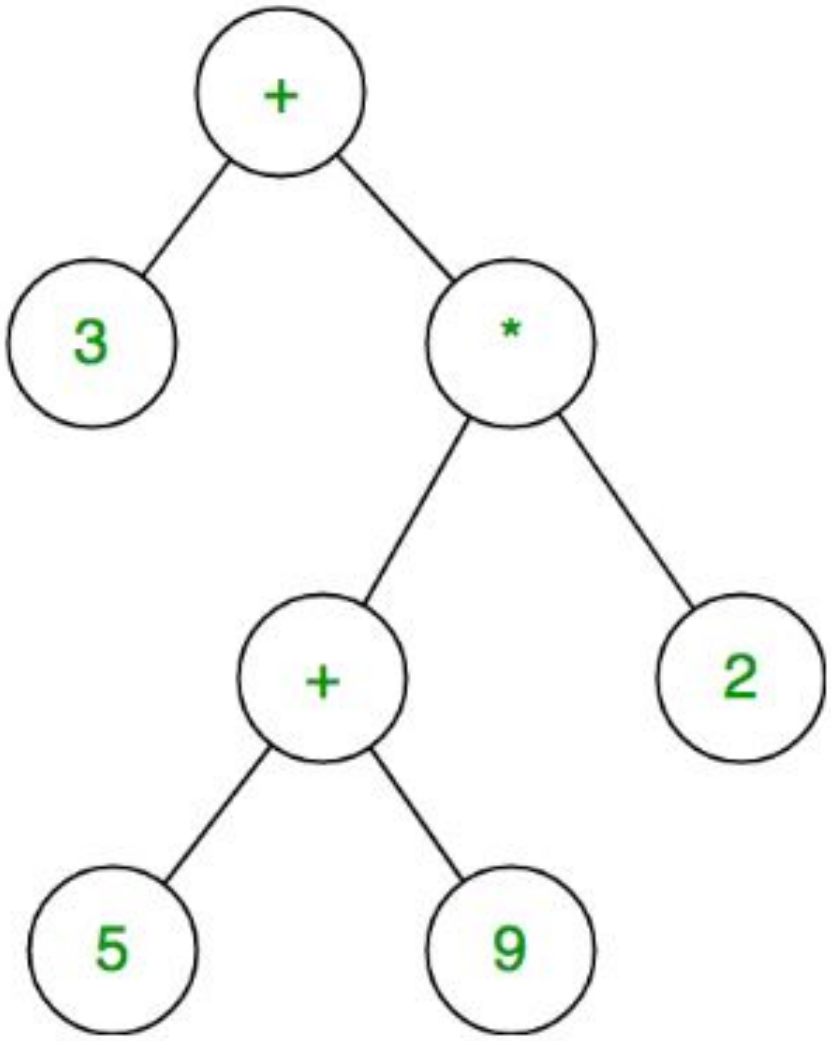
A Level 1

B Level 2

C Level 3

D Root

5.



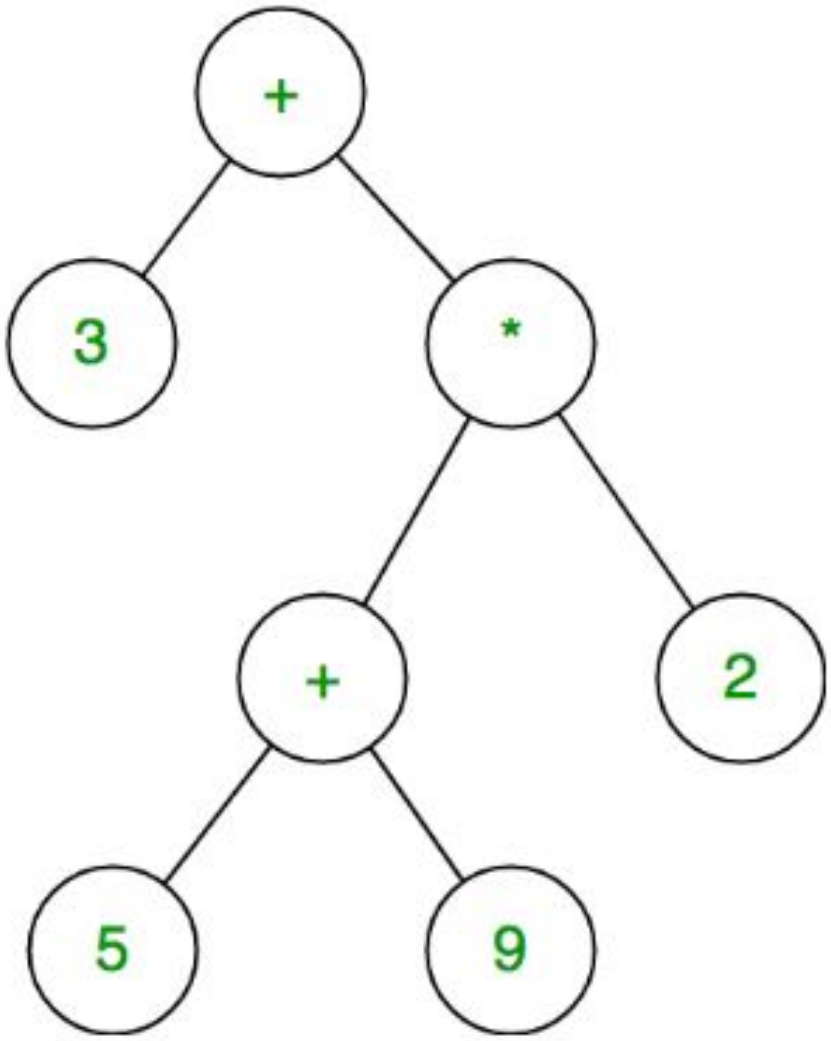
What expression is represented by the tree?

A $3 + ((5 + 9) \cdot 2)$

B $3 + 5 + 9 \cdot 2$

C $(3 + 5 + 9) \cdot 2$

6.



Evaluate:

A 31

B 26

C 34

D 28

7. The number of edges from the root to the node is called _____ of the node.

A Degree

B Length

C Path

D Depth

8. In a full binary tree.....

A Each level has exactly 0 or 2 nodes

B All the leaves are at the same level

C Each node has exactly zero or two children

D Each level has exactly 2 nodes

9. A tree is composed of ____ connected by edges or lines.

A Nodes

B graphs

C stacks

D list

10. Inorder traversal

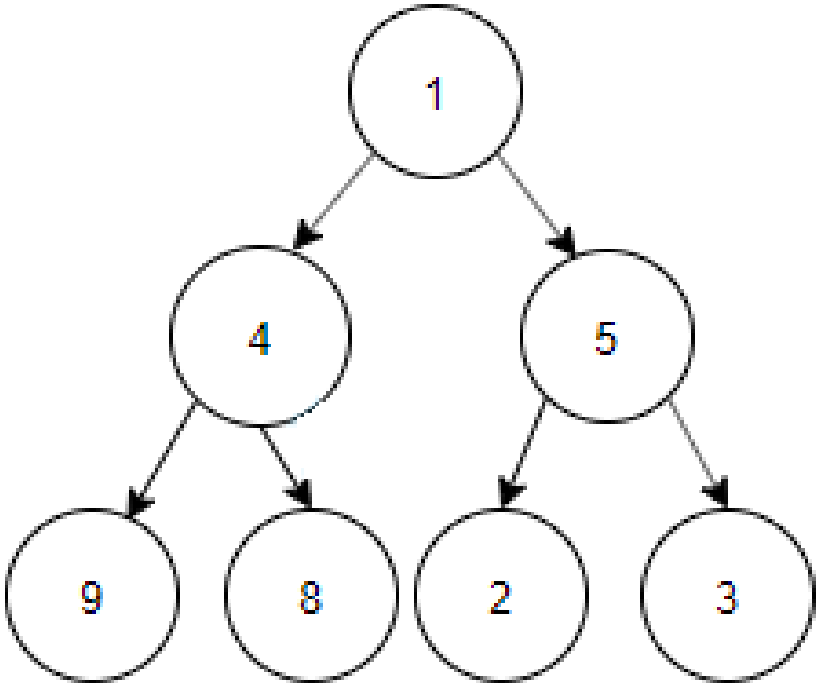
A Left Right Root

B Left Root Right

C Right Left Root

D Right Left Root

11.



Preorder Traversal of the tree

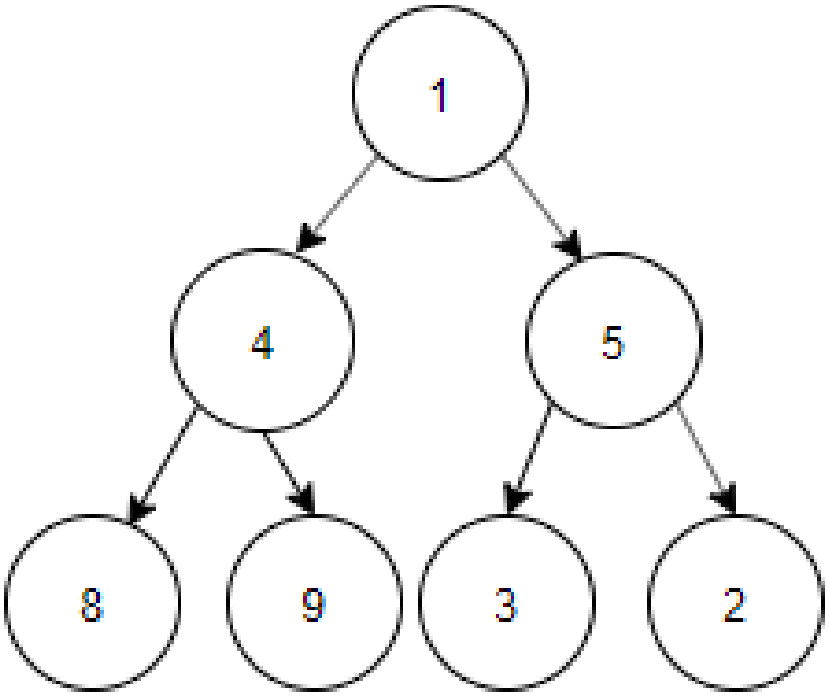
A 1 4 9 5 2 8 3

B 1 4 9 5 2 3 8

C 1 4 9 8 5 2 3

D 1 4 9 8 5 2 3

12.



Post order traversal of the tree

A 9 8 4 2 3 5 1

B 4 9 8 5 2 3 1

C 8 9 4 2 3 5 1

D 8 9 4 3 2 5 1

13. The no of external nodes in a full binary tree with **5** internal nodes is?

---

14. The ____ of a Binary Search Tree starts by visiting the current node, then its left child node and then its right child node.

A Pre-Order Traversal

B In-Order Traversal

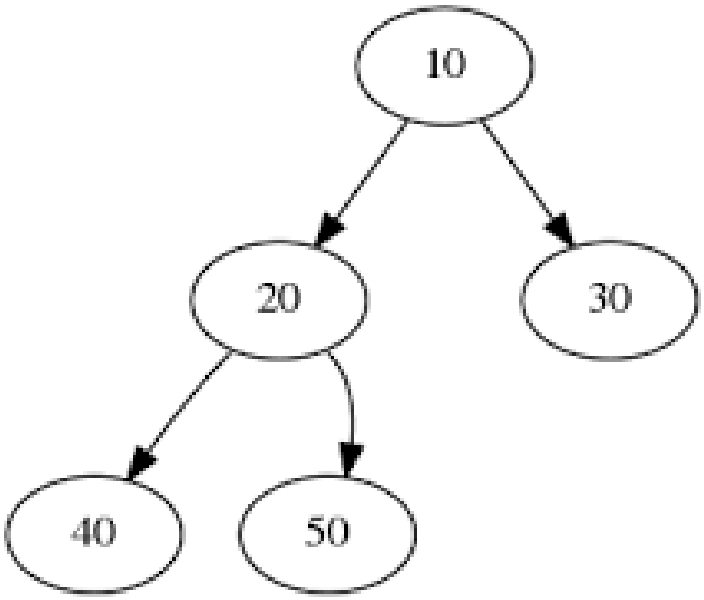
C Post-Order Traversal

D Linear Order Traversal

15. A Binary Tree can have

A	2 children	B	1 child
C	0 child	D	all of the above

16.



In Order traversal

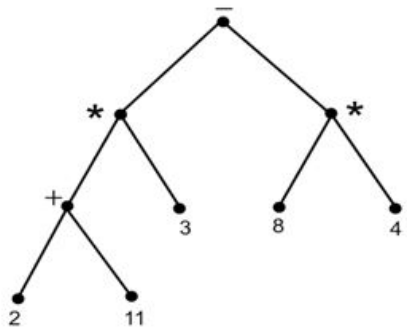
A	40 20 50 10 30	B	40 50 20 30 10
C	10 20 30 40 50	D	50 40 20 30 10

17.

What is the height of the tree?

A	0	B	1
C	undefined	D	2
E	0.5		

18. Evaluate the expression tree:



A. 3 B. 124 C. 7 D. 108

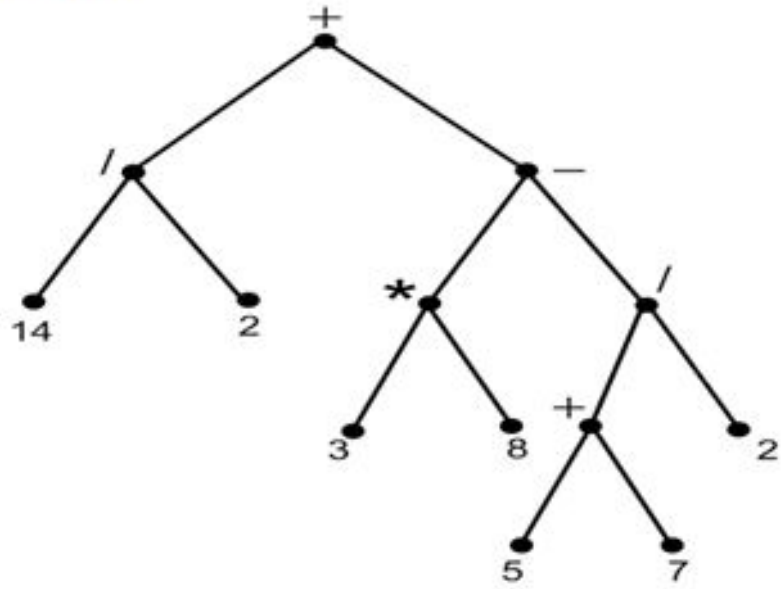
A A

B B

C C

D D

19. Evaluate:



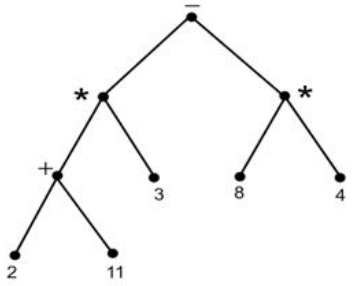
A 20

B 25

C 0

D 86

20. Which expression is represented by the binary tree below?



A. $2+11*3-8*4$ B. $(2+11)3-8(4)$ C. $2+(11*3)-(8*4)$

A A

B B

C C

Answer Key

1. b	2. c	3. a	4. c
5. a	6. a	7. d	8. b
9. a	10. b	11. c	12. d
13. 6	14. a	15. d	16. a
17. a	18. c	19. b	20. b