

“Prefix to Infix Conversion”.

1. What would be the solution to the given prefix notation?

- + 5 / 10 5 5

- a) 2
- b) 5
- c) 10
- d) 7

[View Answer](#)

Answer: a

Explanation: The infix notation of the given prefix notation is $5 + 10 / 5 - 5$ which gives us 2 as our answer.

Subscribe Now: [Data Structure Newsletter](#) | [Important Subjects Newsletters](#)

advertisement

2. What would be the solution to the given prefix notation?

/ / / / 16 4 2 1

- a) 1
- b) 4
- c) 2
- d) 8

[View Answer](#)

Answer: a

Explanation: The infix notation to the given prefix notation is $16 / 4 / 2 / 1$ which gives us 1 as our answer. The infix notation is got from the prefix notation by traversing the equation from the right.

Become [Top Ranker in Data Structure I](#) Now!

3. What would be the solution to the given prefix notation?

+ 9 * 3 / 8 4

- a) 14
- b) 15
- c) 18
- d) 12

[View Answer](#)

Answer: b

Explanation: The infix notation for the given prefix notation is $(9+(3*(8/4)))$ which solves to 15. So 15 is correct answer.

4. What would be the solution to the given prefix notation?

- + 1 2 * 3 / 6 2

- a) 6
- b) -6
- c) 3
- d) -3

[View Answer](#)

Answer: b

Explanation: The infix notation for the given prefix notation is $(1+2)-3*(6/2)$. The result of the given equation is -6.

5. What would be the solution to the given prefix notation?

- * 1 5 / * / 6 3 6 2

- a) 1
- b) 0
- c) -1
- d) -2

[View Answer](#)

Answer: c

Explanation: The infix notation for the given prefix notation is $(1*5)-(6/3)*6/2$. The result of the equation is -1.

6. What would be the solution to the given prefix notation?

* / + 1 2 / 4 2 + 3 5

- a) 12
- b) 7.5
- c) 9
- d) 13.5

[View Answer](#)

Answer: a

Explanation: The infix notation of the given prefix notation is $((1+2)/(4/2))*(3+5)$ which solves to $(3/2)*8$ which by solving gives us 12.

7. Given a prefix and a postfix notation what are the difference between them?

- a) The postfix equation is solved starting from the left whereas the prefix notation is solved from the right
- b) The postfix equation is solved starting from the right whereas the prefix notation is solved from the left
- c) Both equations are solved starting from the same side(right)
- d) Both equations are solved starting from the same side(left)

[View Answer](#)

Answer: a

Explanation: The postfix notation is solved starting from left but whereas the prefix notation is reversed after creating them, therefore it's solved starting from right.

8. When converting the prefix notation into an infix notation, the first step to be followed is _____

- a) Reverse the equation
- b) Push the equation to the stack
- c) Push the equation onto the queue
- d) Push the equation to the stack or queue

[View Answer](#)

Answer: a

Explanation: The steps that are followed are: the equation is reversed, pushed onto a stack, popped one by one and solved. Therefore the first step is reversing the equation.

9. The time complexity of converting a prefix notation to infix notation is _____

- a) $O(n)$ where n is the length of the equation
- b) $O(n)$ where n is number of operands
- c) $O(1)$
- d) $O(\log n)$ where n is length of the equation

[View Answer](#)

Answer: a

Explanation: The processes that are involved are reversing the equation ($O(n)$), pushing them all onto the stack($O(n)$), and popping them one by one and solving them ($O(n)$). Hence the answer is $O(n)$ where n is the length of the equation.

10. Given two processes (conversion of postfix equation to infix notation and conversion of prefix notation to infix notation), which of the following is easier to implement?

- a) Both are easy to implement
- b) Conversion of postfix equation to infix equation is harder than converting a prefix notation to infix notation
- c) Conversion of postfix equation to infix equation is easier than converting a prefix notation to infix notation

d) Insufficient data

[View Answer](#)

Answer: c

Explanation: As the conversion of prefix notation to infix notation involves reversing the equation, the latter is harder to implement than postfix to infix process.