Infix : $(((A + ((B * C) / D)) - F) + (A \wedge E))$

$ABC * D / + F -$

$AE \wedge +$

Postfix $\Rightarrow$ $\boxed{ABC * D / + F - AE \wedge +}$

Prefix $\Rightarrow$ $+ - + A / * B C D F$

$\wedge A E$

$\boxed{+ - + A / * B C D F \wedge A E}$

$A + B$

Postfix $\rightarrow$ $A B +$

Prefix $\rightarrow$ $+ A B$

Infix : $((8 - 2) + ((3 * 4) / (2 \wedge 2)))$

Postfix :

$8 2 -$ $3 4 *$ $2 2 \wedge / +$ $\Rightarrow$ $8 2 - 3 4 * 2 2 \wedge / +$

Prefix : $+ - 8 2$ $/ * 3 4$ $\wedge 2 2$ $\Rightarrow$ $+ - 8 2 / * 3 4 \wedge 2 2$

$$((8 - 2) + (3 + 4) / (2 \wedge 2)))$$

Infix to Postfix

Symbol Scanned	Stack Status	Postfix
(	(	
(	((	
8	((	8
2	((-	8 2
)	(/ /	8 2 -
+	(	8 2 -
(	(+	8 2 -
3	(+ (	8 2 -
*	(+ ((	8 2 - 3
4	(+ ((*	8 2 - 3 4
)	(+ ((*	8 2 - 3 4 *

Symbol	stack Status	Postfix
	(+ (	82 - 34 *
/	(+ (/	
	(+ (/ (	
(		
2	(+ (/ (2^	82 - 34 * 2
^		
2	(+ (?)/ →	82 - 34 * 2 2
)		82 - 34 * 2 2 ^
)	(?*) →	82 - 34 * 22 ^ /
)		82 - 34 * 22 ^ / +

$8 - 2 + (3 * 4) / 2 \wedge 2$

Priority

	$\wedge$
	$/, *$
	$+, -$

Symbol Scanned	Stack Status	Postfix
8		8
2	−	8 2
+		8 2 −
(	+	8 2 − 3
3	+ (	
*	+ (*~~/)~~	8 2 − 34
4		8 2 − 34 *
)	+ /	8 2 − 34 * 2
2	+ /	8 2 − 34 * 2 2
∧	+ / ∧	8 2 − 34 * 2 2 ∧ / +
2		

+	− ∧
	+
	+
*	+ *
	+ /
/	
∧	+ / ∧

Infix : (8 − 2) + (3 * 4) / 2^2   (Infix to Prefix)

=>   2^2 / (4 * 3) + (2 − 8).
                                = ↑

Symbol Scanned	Stack (array)	Expression
2		2
^	^	22
2	/	22^
(	/, (	22^4
4	/, (, *	
*		
3		22^43
)	/ ←	22^43*
+	+	22^43*/ ←
(	+, (	
2	+, (, −	22^43*/2

Symbol	order	Expression
8	+, (, −	22^43*/28
)	+	22^43*/28−
		22^43*/28−*

22^43*/28 − +

=> | + − 8 2 / * 3 4 ^ 2 2 |

Evaluation of postfix

$\rightarrow 8\,2\,-3\,4 * 2\,2^\wedge / +$

Symbol	Stack
8	8
2	8, 2
-	6
3	6, 3
4	6, 3, 4
*	6, 12
2	6, 12, 2
2	6, 12, 2, 2
^	6, 12, 4
/	6, 3
+	(9) $\rightarrow$ Ans.

$8 - 2 = 6$
$3 * 4 = 12$
$2^\wedge 2 = 4$
$12 / 4 = 3$
$6 + 3 = 9$

$\rightarrow 8, 2$

L   R

2
8	$\leftarrow$
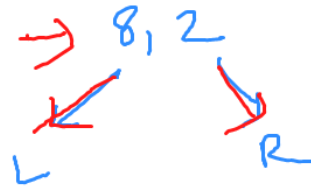
Evaluation of Prefix

$$+ - 82 / * 34 ^ 22 \implies 22 ^ 43 * 128 - +$$

Symbol	Stack
2	2
2	2, 2
^	4
4	4, 4
3	4, 4, 3
*	4, 12
/	3
2	3, 2
8	3, 2, 8
-	3, 6
+	(9) → Ans.

$2 ^ 2 = 4$

$12 / 4$

4, 12

$12 / 4 = 3$

2, 8

$8 - 2 = 6$

3, 6

$6 + 3$

postfix
to
infix

$8\ 2\ -3\ 4\ *\ 2\ 2\ ^\ /\ +$ ←

8	8
2	8,2
−	8−2
3	8−2,3
4	8−2,3,4
*	8−2,3*4
2	8−2,3*4,2
2	8−2,3*4,2,2
^	8−2,3*4,2^2
/	8−2,(3*4)/(2^2)
+	(8−2) + (3*4)/(2^2) ←

4
3
8−2

begin
to
infin

$+ - 8 \; 2 / * 3 \; 4 \wedge 2 \; 2 \quad \Rightarrow \quad 2 \; 2 \wedge 4 \; 3 * / 2 \; 8 - +$

symbol	stack
2	2
2	2 , 2
$\wedge$	$2 \wedge 2$
4	$2 \wedge 2 , 4$
3	$2 \wedge 2 , 4 , 3$
*	$2 \wedge 2 , 3 * 4$
/	$(3 * 4) / (2 \wedge 2)$
2	$(3 * 4) / (2 \wedge 2) , 2$
8	$(3 * 4) / (2 \wedge 2) , 2 , 8$
-	$(3 * 4) / (2 \wedge 2) , (8 - 2)$
+	$(8 - 2) + (3 * 4) / (2 \wedge 2) \; \leftarrow$

$4 , 3$