char	Stack	Operation	Result	Final Print
A				A
/	/	push→/		A
(	/(	push→(		A
C	/C			AC
-	/C-	push→-		ACD
D	/C-			ACD
)	/	pop→-	match	ACD-
*		pop→/		ACD-/
	*	push→*		
(	*(			u
I	u			ACD-/I
-	*(-	push→-		u
K	u	⊘		ACD-/?IU
)	*	pop→-	match	ACD-/IK-
)			Unmatch ∴Invalid	

⑩ 5*6 −8 + (4^(3/(1^1))2*9*7 .

Char	Stack	Operation	Result	Print
				5
5				5
*	*	Push → *		56
6	*			56
−	−	pop → * Push → −		56*
8	−			56*8
+	+	pop → − Push → + ✓		56*8 −
(	+(	Push → (		56*8 −
4	+(			56*8−4
^	+(^	Push → ^		56*8−4
(	+(^(	Push → (		56*8 −4
3	"			56*8 −43
/	+(^(/	Push → /		"
1	"			56*8 −431
1	+(^	pop → / Match		56*8−4311
)	+	pop → ^ Match		56*8 −431/^
)	+			56*8−431/^2
2	+			"
*	+*	Push → *		56*8−431/^29
9	"			56*8−431/^29*
*	+*	pop → * Push → *		

	pop → * push → *	56*8 − 431/^29*
		56*8 − 431/^29*7
	pop → *,+	56*8 − 431/^29*7* +

$$\frac{3*D}{} - \langle J+N \rangle$$

Evaluate the following postfix expressions using stack. Show the steps.

  a. 2536+**5/2-

  b. ab+cd*e/-

YOU DO NOT NEED TO WRITE ANY CODE. (10)

ⓐ char 2536+**5/2-

char	Stack	Operation	Result
2	2	Push → 2	
5	2 5	push	
3	2 5 3	"	
6	2 5 3 6	"	
+	2 5	pop → 3,6	3+6 = 9
9	2 5 9	push → 9	
*	2	pop → 5,9	5×9 = 45
45	2 45	push → 45	
*		pop → 2,45	2×45 = 90
90	90	Push	
/		pop →	
90	90	Push	
5	5,90	Push	
/		pop	5/90 = 90/5 = 18
18	18	Push	
2	18 2	Push	
-		pop	18 - 2 = 16
16	16	Push	

result : pop( )

26)

$$a+b-c*d/e$$

char	Stack	operation	Result
a	a		
b	a b		~~a+b~~
+		pop	
a+b	a+b	push	
c	a+b, c	push	
d	a+b, c d	push	
*	a+b,	pop	$c*d$
~~c*d~~	a+b, c*d	push	
e	a+b, c*d e	push	
/	a+b	pop	$c*d/e$
~~e~~	a+b, $\frac{c*d}{e}$	push	
-		pop	$(a+b) - \frac{c*d}{e}$
	$a+b-c*d/e$	} push	