

Programming Assignment 2 (Expression Evaluation)

Test Cases

buildSymbols (15 pts)

	Input Expression	Points
1	3	1
2	a	1
3	a[3]	1
4	a[b[3]]	1
5	A[A[3]]	1
6	a+a	2
7	a+A	2
8	(a-(b+c)*d)/2	2
9	b*c/a+z*a	2
10	ab*3/abc	2

evaluate (50 pts)

a 2
b 3
c 4
d 8
A 5 (1,1) (2,2) (3,3) (4,4)
B 6 (1,1) (3,3) (4,4) (5,5)
CARR 2 (0,1) (1,2)

	Input Expression	Value	Points
1	3	3	2
2	3+4	7	2
3	3-4-5	-6	2
4	3+4*5	23	2
5	b	3	2
6	a/c	0.5	2
7	a-b+c	3	2
8	a-b*d/a+c-4	-10	3
9	(a)	2	2
10	a-(b-c)	3	3
11	a-((b-c))	3	3
12	a-(b-c)*(2-d)+c	0	3
13	A[1]	1	2
14	A[b-2]	1	3
15	A[(d-c)]	4	3

16	<code>A[3]+B[4]</code>	7	3
17	<code>A[B[0]]</code>	0	3
18	<code>d*(c-B[a+CARR[0]-A[1]+b])</code>	-8	4
19	<code>A[B[CARR[1]*2]]/2</code>	2	4