Practicing Functions

Problem 1

Var	Val

Dojo

Problem 2

Var	Val
x	15

→

Var	Val
return	15

Console
hello
x is 15

Problem 3

Var	Val
x	18

→

Var	Val
n	3, 18
return	18

Console
n is 3
x is 18

Problem 4

Var	Val
z	15
b	~~15~~ →
	10

Var	Val
z	10
return	10

Console
15
10
10
15

Problem 5

Var	Val
c	15
e	→ 20

Var	Val
c	10, 20
return	20

Console
15
10
20
15

Problem 6

Var	Val
x	→ 16

Var	Val
n	3
y	6
return 6	

\+

Var	Val
n	5
y	10
return 10	

Console
n is 3
n is 5
x is 16

Problem 7

Var	Val
	→

Var	Val
num1	2
num2	3
return 5	

Var	Val
num1	3
num2	5
return 8	

Console
5
8

Problem 8

Var	Val
	→

Var	Val
num1	2
num2	3
return 5	

Var	Val
num1	3
num2	5
return 8	

Console
2
5
3
8

Problem 9

Var	Val
x	→ 13

Var	Val
a	2
b	3
c	5
return 5	

\+

Var	Val
a	3
b	5
c	8
return 8	

Console
c is 5
c is 8
x is 13

Problem 10

Var	Val
x	→

var	val
a	
b	
c	

\+

var	val
a	
b	
c	

\+

var	val
a	
b	
c	

Problem 10

Var	Val
x	→ (19)

Step 1 $x = d(2,3) + d(3, \begin{pmatrix} d(2,1) \end{pmatrix}) + d(d(2,1), d(2,3))$

d(2,3)
Var	Val
a	2
b	3
c	5
return	5

d(2,1)
Var	Val
a	2
b	1
c	3
return	3

d(2,3)
Var	Val
a	2
b	3
c	5
return	5

Step 2 $x = 5 + d(3,3) + d(3,5)$

d(3,3)
Var	Val
a	3
b	3
c	c
return	6

d(3,5)
Var	Val
a	3
b	5
c	8
return	8

Step 3 $x = 5 + 6 + 8$
$x = 19$

Console Order: ~~d(2,3), d(2,1), d(2,1), d(2,3), d(3,3), d(3,5)~~
~~c is 5, 3, 3, 5, 6, 8~~
~~x is 19~~
Console Order (d(2,3)

Console order: left to right

$d(2,3), d(2,1), d(3,3), d(2,1), d(2,3), d(3,5)$

c is 5

c is 3

c is 6

c is 3

c is 5

c is 8

x is 19