In class sheet
Some visualizations

Number ->   -> Number

function

y = f(x)

In class sheet
Some visualizations
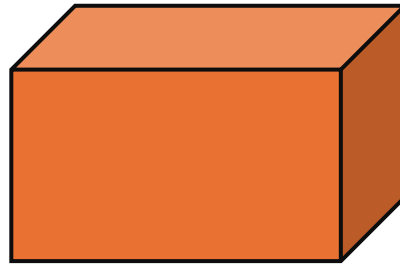
Number ->

-> Number

function

$$y = f(f(f(x)))$$

In class sheet

Some visualizations

Function ->

thrice

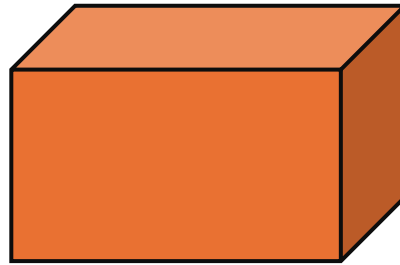-> Function

In class sheet
Some visualizations

Function ->   -> Function

thrice

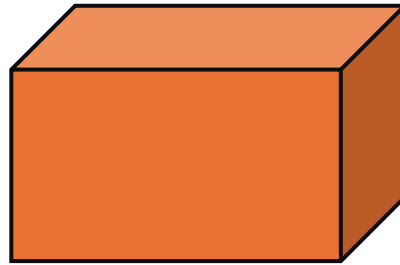Number -> -> Number -> Number -> -> Number

In class sheet
Some visualizations

Function ->   thrice   -> Function

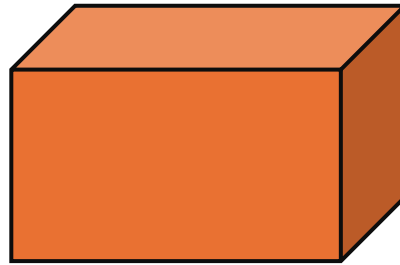Number -> +1 -> Number   ->   Number -> +1 +1 +1 -> Number

add1

thrice(add1) = add3

In class sheet
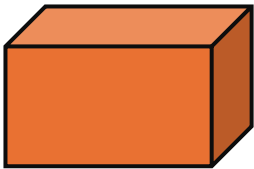## Some visualizations

Function -> -> Function
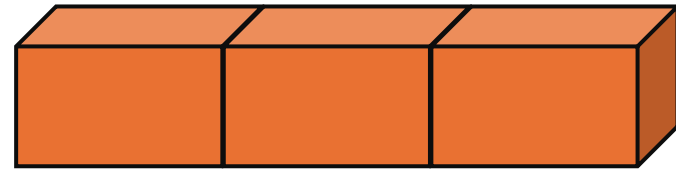
thrice
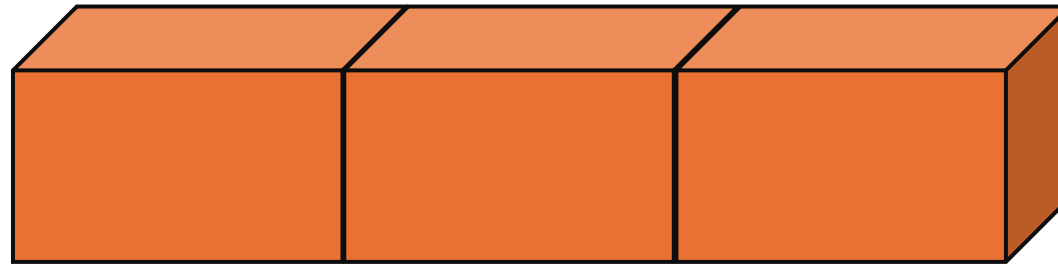
Function -> -> Function

thrice

->

Function -> -> Function

thrice(thrice)

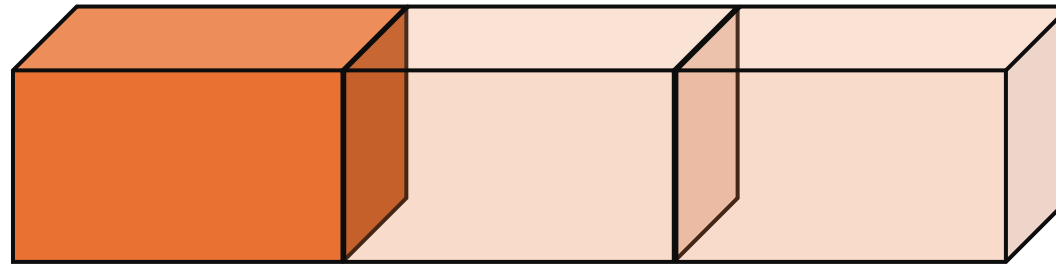# In class sheet

Some visualizations

add1 ->

thrice(thrice)

-> ???

In class sheet
Some visualizations

add1 ->

thrice(thrice)

-> ???

Number -> +1 -> Number

add1

->

Number -> +1 +1 +1 -> Number

thrice(add1) = add3

In class sheet
Some visualizations

add3

add1 ->

-> ???

thrice(thrice)

Number -> +1 -> Number

add1

->

Number -> +1 +1 +1 -> Number
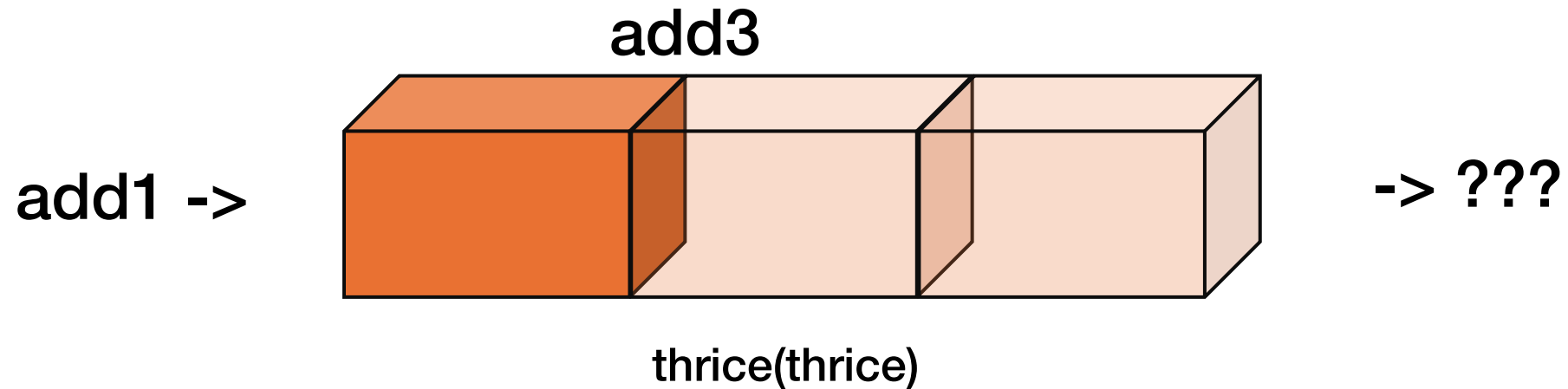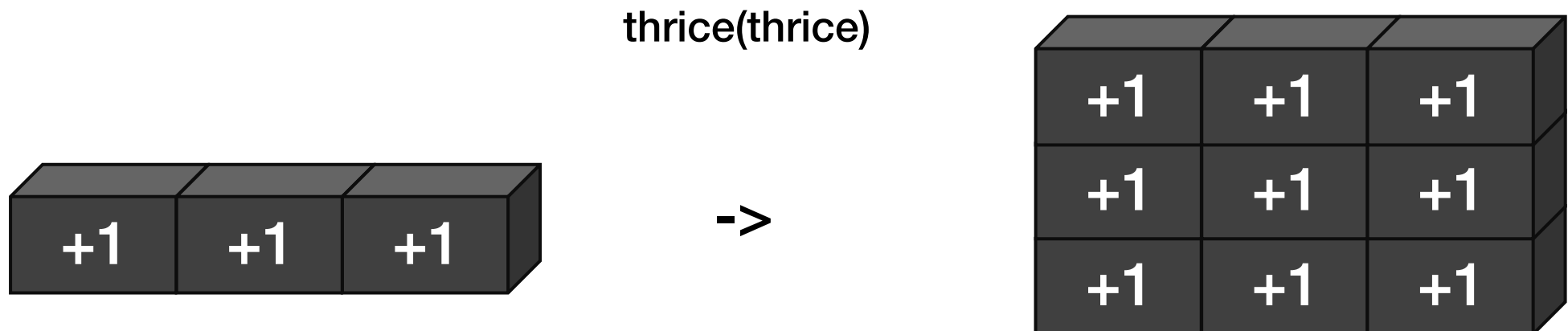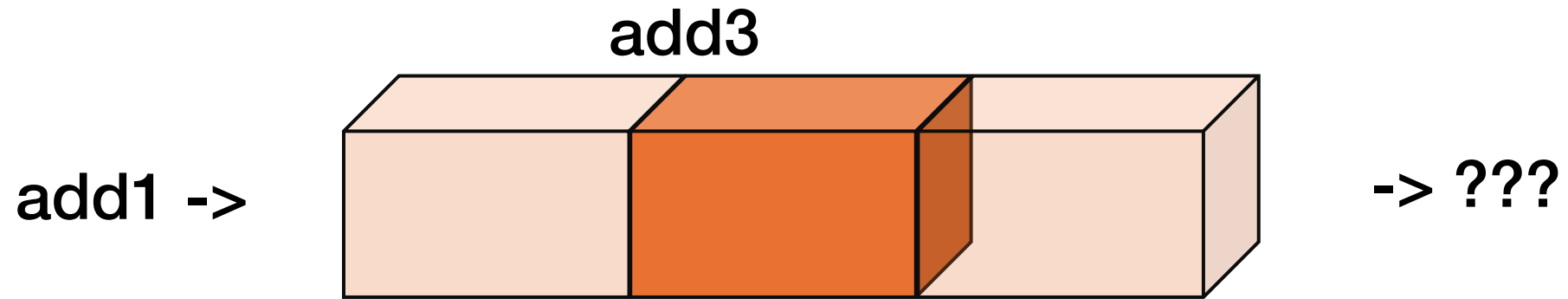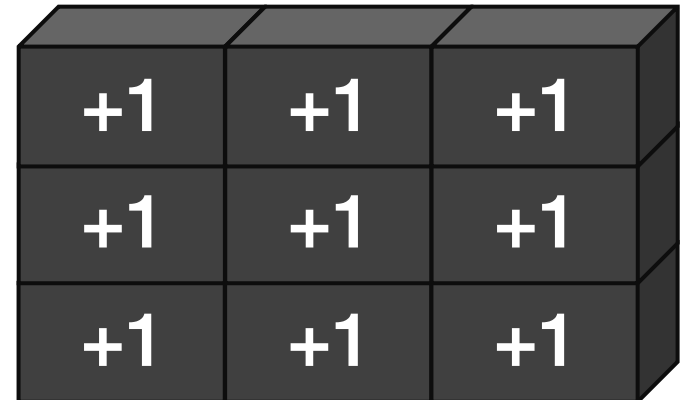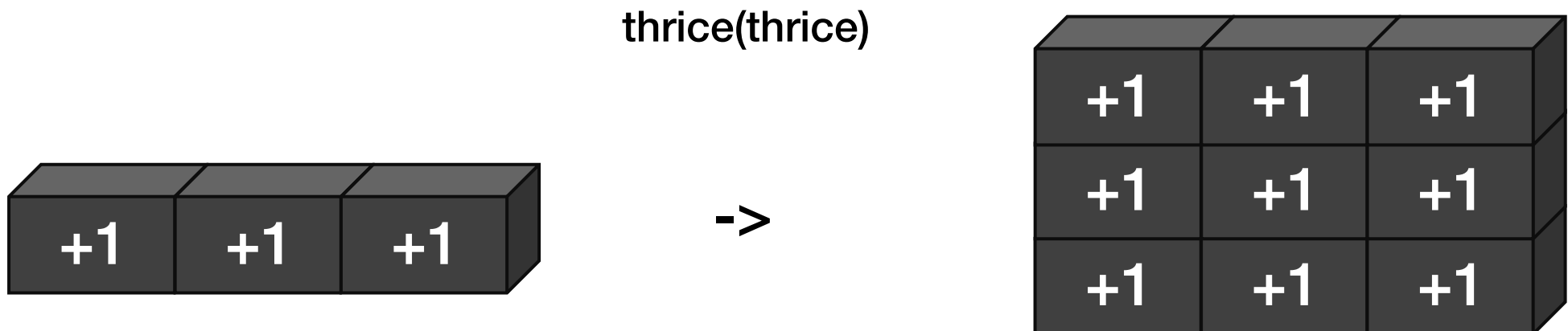
thrice(add1) = add3

In class sheet
Some visualizations

add3

add1 ->

-> ???

thrice(thrice)

+1 +1 +1

->

+1 +1 +1
+1 +1 +1
+1 +1 +1

In class sheet
Some visualizations

add1 ->

add3   add9

thrice(thrice)

-> ???

+1 | +1 | +1

->

+1	+1	+1
+1	+1	+1
+1	+1	+1

In class sheet
Some visualizations

add3   add9

add1 ->

-> add27
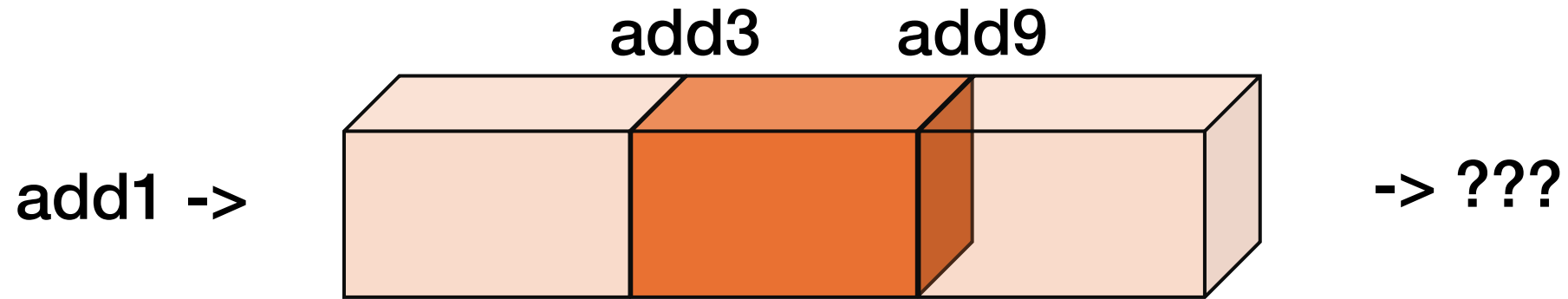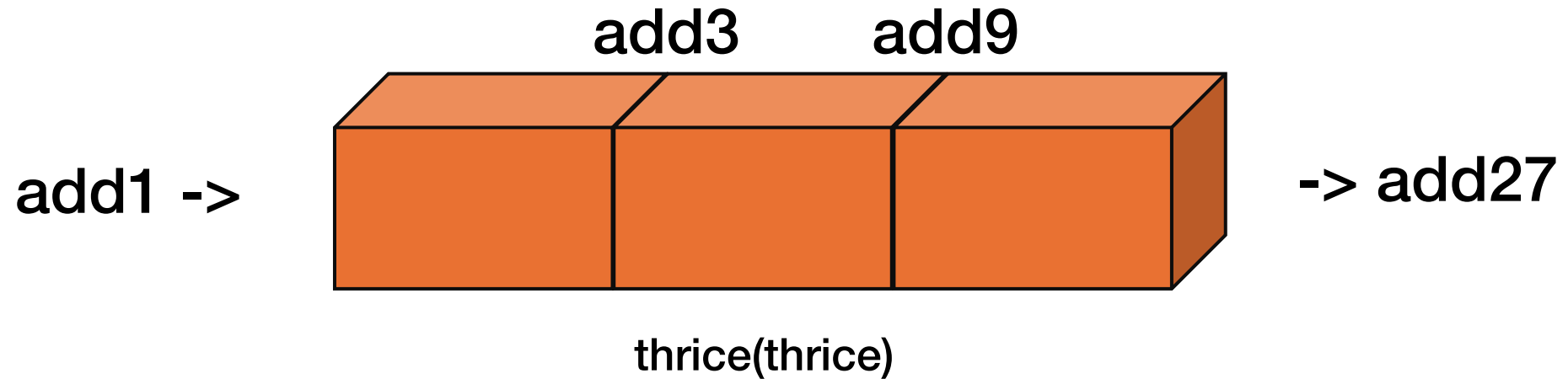
thrice(thrice)

In class sheet

Additional questions

What do these evaluate to? Why?

- `thrice(thrice(add1))(6);`
- `((twice(thrice))(add1))(6);`
- `((thrice(twice))(add1))(6);`