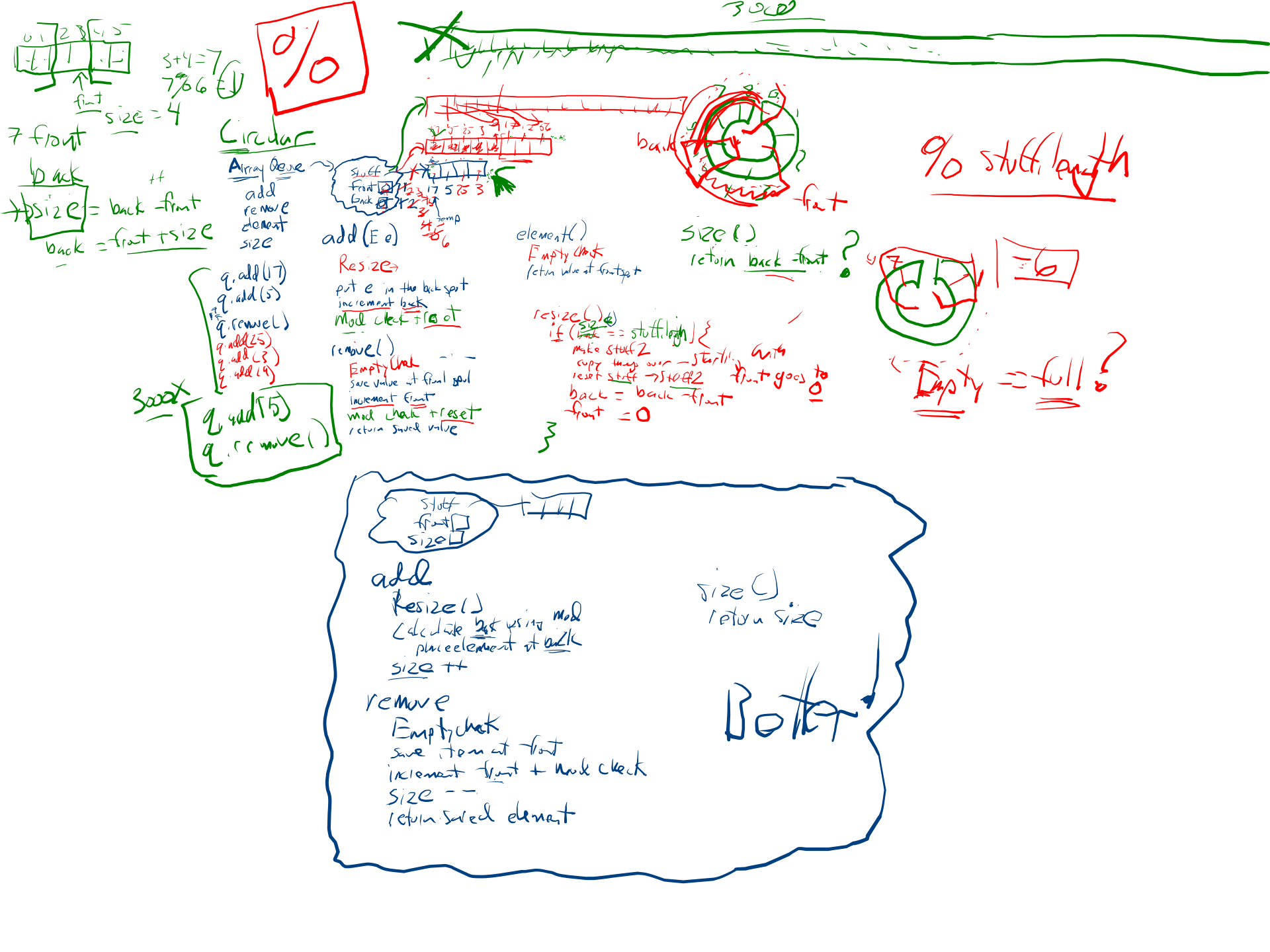
%
Circular
Array Deque
add
remove
element
size
front
back
size = 4
7 front
back
size = back - front
back = front + size
add(E e)
Resize
put e in the back spot
increment back
Mod check front
remove()
Empty Check
save value at front spot
increment front
mod check + reset
return saved value
element()
Empty check
return value at front spot
size()
return back - front ?
resize()
if (size == stuff.length) {
make stuff2
copy things over — start... with front goes to 0
reset stuff -> stuff2
back = back - front
front = 0
}
% stuff.length
Empty = full?
stuff
front
size
add
Resize()
Calculate back using mod
place element at back
size ++
remove
Empty check
save item at front
increment front + mod check
size --
return saved element
size()
return size
Both