

```
count++; /* last execution of for */
count++; /* for return */ return tempsum;
```

} Examining the program, we can see that if count's initial value is 0, it's final value will be $2n+3$. Thus, each invocation of sum executes a total of $2n+3$ steps. \square

```
float sum(float list[], int n)
{
    float tempsum = 0;
    int i;
    for(i = 0; i < n; i++)
        count += 2;
    count += 3;
    return 0;
}
```

→ Simplified version

Ex 1.10 [Recursive summing of a list of numbers]: Find the step count

```
float rsum(float list[], int n)
{
    count++; /* for if conditional */
    if(n) {
        count++; /* for return and rsum invocation */
        return rsum(list, n-1) + list[n-1];
    }
    count++;
    return list[0];
}
```

. To determine the step count for this function, we first need to figure out the step count for the boundary condition of $n=0$.

. We can see that when $n=0$ only the if conditional and the second return statement are executed. So, the total step count for $n=0$ is 2.