

[It turns out that in class we did not reach this far into the treatment of Simon's algorithm. But you can still do the problem.]

In class we showed that the expected number of subroutine calls in Simon's algorithm is

$$\sum_{k=0}^{n-2} \frac{2^{n-1}}{2^{n-1} - 2^k}.$$

How big is it? I've got a crude upper bound in mind, but if you can come up with something tighter that is easily explained, I'd like to know it.