1 Problems

1. Do problem 1 on p. 152 of the textbook.


4. Do problem 5 on p. 153 of the textbook. The recurrence relation should state that it holds only for \( n > 1 \) and \( n \) is a power of 2. You may prefer to write the recurrence relation and basis step in the form used in class:

\[
\begin{align*}
P(2^0) & = 1 \\
P(2^n) & = 2P(2^{(n-1)}) + 3, \text{ for } n > 0
\end{align*}
\]

(Hint: You may find the result of Example 15 on p. 99 useful.)
