

5-1. *Soln.* The for-loop runs n times, with 2 multiplications and 1 addition per iteration. So there are $2n$ multiplications and n additions in the worst and the average case. Consider Horner's method (Exercise 1-8, page 28). The for-loop runs n times, with 1 multiplication and 1 addition per iteration. So Horner's method brings the number of multiplications down to n .