

3.5.1

We are asked to use Horner's algorithm to find $p(4)$, when

$$p(z) = 3z^5 - 7z^4 - 5z^3 + z^2 - 8z + 2$$

We arrange the calculation as shown in [KC, page 112] and we are able to compute the values.

4	3	-7	-5	1	-8	2
		12	20	60	244	944
	3	5	15	61	236	946

Meaning that $p(4)$ evaluates to 946.