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EX.0.1.6, Sauer

Explain how to evaluate the polynomial below for a given input x, using as few operations as possible. You are not allowed to use the power operator. So no x**5 for example. You can only multiplications and additions. How many multiplications and how many additions are required?

a.
$$p(x) = a_0 + a_5 x^5 + a_{10} x^{10} + a_{15} x^{15}$$

b.
$$p(x) = a_7 x^7 + a_{12} x^{12} + a_{17} x^{17} + a_{22} x^{22} + a_{27} x^{27}$$