$a_n = (\text{num_digits}(((\max(a_{n-2}, a_{n-3}, a_{n-3}) + 1) + a_{n-1})) - (\text{num_digits}(\text{num_digits}(a_{n-3})) - a_{n-1})) + a_{n-1}) - (\text{num_digits}(a_{n-3}) - a_{n-1})) + a_{n-1}) + a$