

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