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