$a_n = (\text{num\_digits}(\text{reverse}(\text{num\_digits}(n))) + \text{reverse}(\text{num\_digits}(\text{min}(\text{num\_digits}(n), \text{max}(a_{n-2}, a_{n-1}, a_{n-2}), a_{n-1}, a_{n-2})) + \text{reverse}(\text{num\_digits}(\text{min}(\text{num\_digits}(n), \text{max}(a_{n-2}, a_{n-1}, a_{n-2}), a_{n-1}, a_{n-2}))) + \text{reverse}(\text{num\_digits}(\text{min}(\text{num\_digits}(n), \text{max}(a_{n-2}, a_{n-1}, a_{n-2}), a_{n-1}, a_{n-2})))) + \text{reverse}(\text{num\_digits}(\text{min}(\text{num\_digits}(n), \text{max}(a_{n-2}, a_{n-1}, a_{n-2}), a_{n-1}, a_{n-2})))) + \text{reverse}(\text{num\_digits}(\text{min}(\text{num\_digits}(n), \text{max}(a_{n-2}, a_{n-1}, a_{n-2}), a_{n-1}, a_{n-2})))) + \text{reverse}(\text{num\_digits}(\text{min}(\text{num\_digits}(n), \text{max}(a_{n-2}, a_{n-1}, a_{n-2}), a_{n-2}, a_{n-2$