

Number Theory Quiz V

RDB

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Problem 1 Determine all $x \in \{0, 1, 2, \dots, 84\}$ such that

$$\begin{aligned}x &\equiv 2 \pmod{5} \\x &\equiv 1 \pmod{17}.\end{aligned}$$

Problem 2 For which $n \in \{1, 2, \dots, 10\}$ does $d(n) = 2n$?