

$$1) d(n) \rightarrow \text{مصدر} \Rightarrow d(d(n)) \leq d(\sqrt{n}) \Rightarrow d^{-1} \rightarrow d(n) \leq \sqrt{n} + \sqrt{n} \geq n + \sqrt{n} - r$$

$$\sqrt{n} \geq n \rightarrow (1) // d(d(n)) \Rightarrow n \in \mathbb{Q} \Rightarrow n \geq 1 (2) / d(n) \in \mathbb{Q} \rightarrow n + \sqrt{n} - r \geq t + t - r \geq$$

$$(t+r)(t-r) \geq \dots \rightarrow \frac{-r}{t-r} \rightarrow \sqrt{n} \in [1, t+r) \rightarrow n \in [1, t+r) (3) / (1) \cap (2) \cap (3) \rightarrow [1, t] =$$

(2) مخرج

$$4) \Rightarrow \dots \rightarrow x \rightarrow [1, 9] \rightarrow (-1) \rightarrow [-1, 1] \rightarrow \sqrt{\dots} \rightarrow [1, r] \rightarrow \frac{[1, r]}{r} \rightarrow \dots \Rightarrow \text{مخرج}$$

$$\max \rightarrow \frac{r}{r} - \frac{r}{r} \Rightarrow \epsilon - \frac{1}{\epsilon} \rightarrow \frac{1}{\epsilon} \Rightarrow \min \rightarrow \frac{r}{r} - \frac{r}{r} \rightarrow \frac{1}{r} - r \rightarrow -\frac{r}{r}$$

$$[-\frac{r}{r}, \frac{1}{\epsilon}] \rightarrow \frac{1}{\epsilon} + \frac{r}{\epsilon} = \frac{r+1}{\epsilon}$$

$$10) d(n) = \frac{n - [n]}{[n]} - r \Rightarrow [-r, 1) \Rightarrow d(d(n)) \Rightarrow -r \rightarrow \frac{-r}{r} \rightarrow \frac{1}{r} - \epsilon \rightarrow \frac{-1}{r} /$$

$$\rightarrow -1 \rightarrow \frac{-1}{r} - \frac{r}{r} \rightarrow \frac{1}{r} - \frac{r}{r} \rightarrow \frac{-r}{r} \rightarrow \frac{-r}{r} \Rightarrow [-1, \frac{-r}{r}]$$

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