

رابطه رضوانی راد یازدهم و سیزدهم - الف

② $\sqrt{\frac{x}{\log_2 x}} \rightarrow ① \quad \frac{1}{x} \rightarrow \frac{1}{x} \Rightarrow D = (0, 1) \checkmark$
 $[x > 0]$

$x^2 - x - 1 > 0 \Rightarrow \frac{1}{x} - \frac{1}{x+1} \rightarrow x > 2, x < -1$

$x^2 - 1 > 0 \Rightarrow x \in \mathbb{R} - (-1, 1)$

$\Rightarrow \mathbb{R} - [-1, 2] \checkmark$

$\alpha - \beta = \frac{\int \Delta}{|a|} = \frac{\int (f(\log_2 x) + f(\log_2 x) \log_2 x)}{\log_2 - \log_2}$

$\log_2 10 = \log_2 10 - \log_2 1 = 1 - 0 = 1$

$\log_2 10 \leq 0.17 + 0.17 \leq 1 \quad \log_2 10 = 0.17 - 0.17 = 0$

$\Rightarrow \frac{\int (1/x) + f(1/x) \times 0.17}{1} = \frac{\sqrt{1/x + 1/x^2}}{1} = \frac{1/x}{1} = \frac{1}{x}$
 $\Rightarrow \frac{1}{x} \checkmark$

$x^m \leq x \times x^r \Rightarrow x \leq x^{\frac{m+r}{r}}$

$\frac{1}{r} \log_2 x \times x^r = \frac{1}{r} \log_2 x^{\frac{m+r}{r}} = \frac{m+r}{r} \checkmark$

$x^a = x \Rightarrow x^a = a$

$x^{a+r} = b \Rightarrow x \times x^a = x^r \rightarrow x \times x^a - 1 = 1.0$

$\log_2 10 = 1 \checkmark$

$n^a = m \quad \frac{2}{3}$
 $\log_m n = \log_{n^{a+1}} n^{a+1} = \frac{a+1}{a+1} = 1$

$\frac{a+1}{a+1} = 1 \quad \frac{a+1}{a+1} = 1 \Rightarrow [b] = 1 \checkmark$

$\log_2 10 + \log_2 10 = 1 \Rightarrow \log_2 10 + \log_2 10 = 1$
 $\Rightarrow \log_2 10 = 0.5 \checkmark$

$\log_{x^r} x^r = \log_{x^r} x^r = \frac{r}{r} = 1 \checkmark$

$v = x^{1/r} \quad \frac{a}{r} = \frac{f}{r} \Rightarrow x^r$

$x^{1/r} = a \quad x^{1/r} = x \Rightarrow x = x^r \checkmark$

$\log_{x^r} x^r = \log_{x^r} x^r = \frac{r}{r} = 1 \checkmark$

$(\frac{a}{r})^{x^r} = (\frac{r}{a})^{x^r}$

$\Rightarrow x^r = 1 - x \rightarrow x^r + x - 1 = 0 \Rightarrow \frac{1}{x} \checkmark$

$\frac{1}{r} \log_2 x = \frac{r}{r} \checkmark$

$\frac{a}{b} = \frac{b}{-a} = \frac{b}{a}$

$\frac{a}{b} = \log_2 x \quad x = b + c$

↓

$\log_2 x \times b \Rightarrow x = \log_2 x \times b$

$a = \frac{\log_2 x \times b}{r}$

$\log_2 x \times b = b + c \Rightarrow c = b (\log_2 x)$

$\Rightarrow (\frac{1}{r})^{\log_2 x \times b} = (\frac{1}{r})^{\log_2 x \times b}$

$(\frac{1}{r})^{\log_2 x \times b} = (0.17)^{\frac{1}{r}} = \frac{1}{r} \checkmark$