Subject:

Year: Month: Day:

تمرین شماره ۱۹ حل تمامی

①

① → $2\times[2^-] + a[0^+] = 2$

$2\times[2^+] + a[0^-] = 4 - a$

② → $[2\times\frac{1}{2}^- - 1] = [1^- - 1] = -1$

③ → $[8\times(-\frac{1}{8}) + \frac{1}{2}] = [-\frac{1}{2}] = -1$

④

$\frac{10x - 5 - 11}{14x + 8} = \frac{1}{0^-} = -\infty$

$x < -\frac{1}{2}$ $\quad x^2 > \frac{1}{4}$ $\quad \frac{1}{x^2} < 4$

⑤

$\frac{\sin^2 \pi x}{1 + \cos \pi x} = \frac{1 - \cos^2 \pi x}{1 + \cos \pi x} = 1 - \cos \pi x = 1 + 1 = 2$

⑥

$\frac{2x + 3 - 3x - 4}{1 + x} \times \frac{3}{2} = \frac{-3}{2}$

⑦

$\frac{(\sqrt{x} - 1)(2\sqrt{x} - 5)}{2x - \sqrt{3x + 1}} \times \frac{2x + \sqrt{3x - 1}}{2x + \sqrt{3x - 1}} = \frac{4(2\sqrt{x} - 5)}{(4x + 1)(\sqrt{x} + 1)} = -1.2$

⑧

$a = -\sqrt{c}$ $\qquad \frac{ab}{c} = \frac{-2b \times b}{4b^2} = \frac{-1}{2}$

$\frac{b}{2\sqrt{bx + c}} = \frac{1}{4}$ $\qquad a + \sqrt{c} = 0$ $\qquad \frac{b}{2\sqrt{c}} = \frac{1}{4}$ $\qquad 2b = \sqrt{4}$

⑩

$8a - b = 0$ $\qquad 8a = b$

$\frac{\frac{\frac{b}{3\sqrt[3]{x^2}}}{2\sqrt{2 + \sqrt[3]{x}}}}{a} = \frac{b}{48a} = \frac{8a}{48a} = \frac{1}{6}$