

۱۹, ۱۷۵

۴x-۵ ≠ ۰ $x^2 + ax + b = 0 \Rightarrow 4 + 4a + b = 0^+$ ۴ درجه ۳ کج است

$(x-4)^2 = x^2 - 4x + 4 \quad \begin{cases} a = -4 \\ b = 4 \end{cases} \quad a+b=0$ ✓

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$\frac{\sqrt[3]{4}}{0^+} = +\infty \Rightarrow (x - \sqrt[3]{4})^2 = x^2 - 2\sqrt[3]{4}x + \sqrt[3]{4}^2$

$a = -2\sqrt[3]{4} \quad b = \sqrt[3]{4}^2$
 $\left[\frac{\sqrt[3]{4}^2}{-2\sqrt[3]{4}} \right] = \left[\frac{\sqrt[3]{4}}{-2} \right] = -1$ ✓

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li $\frac{-1+a}{|\frac{1}{\sqrt{a}} \times \frac{1}{\sqrt{a}}| + a} = \frac{-1+a}{|\frac{1}{a} + a| + a} = -\infty \quad I: -1+a > 0 \Rightarrow a > 1, \quad |\frac{1}{a} + a| + a < 0$
غلط $a < 0$

II: $-1+a < 0 \Rightarrow a < 1, \quad |\frac{1}{a} + a| > -a \Rightarrow \frac{1}{a} + a > -a \Rightarrow \frac{1}{a} + a < a \times$

$\Rightarrow 2a > -\frac{1}{a} \Rightarrow a > -\frac{1}{4} \Rightarrow -\frac{1}{4} < a < 1$

$|\frac{1}{a} + a| + a = 0^+ \Rightarrow a < 0 \Rightarrow -\frac{1}{4} < a < 0 \Rightarrow [a] = -1$ ✓

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

$x^2 > \frac{1}{4} \Rightarrow \frac{x}{x^2} > 4$

۱, ۱۷۵

li $\frac{14x+9}{4x+12} = \frac{-1+9}{-14^+ + 12} = \frac{1}{0^+} = +\infty$ ✓

if $x \rightarrow (-12)^+ = x > -12 \rightarrow x+12 > 0 \rightarrow x \rightarrow 12^+$! دقت

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$x > 2 \Rightarrow x^2 > 4$
 li $\frac{x^2-4}{x^2-1} = \frac{(x-2)(x+2)}{(x-2)(x^2+4x+4)} = \frac{4}{14} = \frac{1}{4}$ ✓

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$$\frac{0}{\infty} \xrightarrow{\text{Hop}} \frac{2x+10}{y \times \frac{1}{\sqrt[3]{x^2}}} = \frac{-4}{y \times \frac{1}{14}} = -14$$

Ⓢ

$$\frac{\sqrt{4+3x} - \sqrt{4-x}}{\sqrt{1-\cos x}} \times \frac{\text{مخرج مشترك}}{\text{مخرج مشترك}} = \frac{4+3x - 4+x}{\sqrt{1-\cos x} \times \sqrt{4}} = \frac{2x}{|\sin \frac{x}{2}| \times \sqrt{4} \times \sqrt{4}}$$

درجه Sin
مشتق

✓

$$= \frac{2x}{-4 \sin \frac{x}{2}} \xrightarrow{\text{سليم}} \frac{-x}{\frac{1}{2}} = -2$$

Ⓢ

$$\frac{0}{0} \Rightarrow K+1=0 \Rightarrow K=-1 \quad \text{سليم:} \quad \frac{K+1 - \left(\frac{ax^2}{y}\right)}{Kx^2}$$

$$\Rightarrow \frac{2K+2-ax^2}{\frac{y}{Kx^2}} = \frac{2K+2-ax^2}{2Kx^2} = \frac{-ax^2}{-2x^2} \xrightarrow{Kx^2} = \frac{a}{2}$$

Ⓢ

$$\frac{a}{2} = 2 \Rightarrow a = 4 \quad \frac{a}{K} = -2$$

$$\frac{2\sqrt{x-3a}}{\sqrt{x^2-9a^2}} + \frac{3\sqrt{x} - \sqrt{4a}}{\sqrt{x^2-9a^2}} \times \frac{1 \text{ مشترك}}{1 \text{ مشترك}} \times \frac{2 \text{ مشترك}}{2 \text{ مشترك}} = \frac{9(x-3a)}{\sqrt{x^2-9a^2} \times (3\sqrt{3a} + \sqrt{4a})} *$$

$$\Rightarrow \frac{2\sqrt{x-3a}}{\sqrt{x^2-9a^2} \times \sqrt{x+3a}} = \frac{2}{\sqrt{4a}} \quad \text{نات:} \quad \frac{3\sqrt{x-3a}}{\sqrt{x-3a} \sqrt{x+3a} \times (3\sqrt{3a} + \sqrt{4a})}$$

Ⓢ

$$\frac{9\sqrt{x-3a}}{\sqrt{4a} \times 2\sqrt{3a}} = 0 \quad \frac{2}{\sqrt{4a}} + 0 = \frac{2}{\sqrt{4a}}$$

$$\xrightarrow{-1^+} \frac{1+K}{x^2-1} = \frac{1+K}{1^+-1} = \frac{1+K}{0^-} = -\infty$$

$$1+K > 0 \Rightarrow K > -1$$

$$\xrightarrow{-1^-} \frac{1+K}{x^2-1} = \frac{1+K}{1^+-1} = \frac{1+K}{0^+} = -\infty$$

$$1+K < 0 \Rightarrow K < -1$$

$$-1 < K < -\frac{1}{y} \Rightarrow -\pi < K\pi < -\frac{\pi}{y}$$

✓

$$-1 < \cos K\pi < 0 \Rightarrow x, y \text{ منفي} \Rightarrow \text{ناقص}$$

Ⓢ