

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۲۵... کلاس

$$\frac{-1}{x^2+2x+b} = -\infty \xrightarrow[\text{طفراس}]{\text{منحنی}} \frac{-1}{(x-2)^2} = \frac{-1}{x^2-4x+4} \rightarrow a=-4, b=4$$

$$a+b=0 \quad \checkmark$$

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$$\frac{\sqrt[3]{x}}{2\sqrt[3]{x}+a\sqrt[3]{x}+b} = +\infty \xrightarrow[\text{طفراس}]{\text{منحنی}} \frac{\sqrt[3]{x}}{(x-\sqrt[3]{x})^2} = \frac{\sqrt[3]{x}}{x^2-2x\sqrt[3]{x}+2\sqrt[3]{x}}$$

$$\left[\frac{b}{a}\right] = \left[\frac{\sqrt[3]{x}}{-\sqrt[3]{x}}\right] = -1 \quad \checkmark$$

$$\begin{cases} b=2\sqrt[3]{x} \\ a=-2\sqrt[3]{x} \end{cases}$$

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$$\left. \begin{array}{l} \text{منحنی بالا} \\ \text{صفر باشد} \end{array} \right\} \rightarrow \left| \frac{\sqrt{x}}{\sqrt{x}} + a \right| + a = 0 \rightarrow \frac{1}{x} + 2a = 0 \rightarrow a = -\frac{1}{6}$$

$$\left[-\frac{1}{6}\right] = -1 \quad \checkmark$$

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$$\frac{-1 - (-9)}{-12 + 12} = \frac{1}{0^+} = +\infty \quad \checkmark$$

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$$\frac{x^2-4}{x^2-1} \rightarrow \frac{(x-2)(x+2)}{(x-1)(x^2+2x+4)} = \frac{4}{12} = \frac{1}{3} \quad \checkmark$$

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$$HOP \rightarrow \frac{x+10}{\sqrt{x^2}} \xrightarrow{x=-1} \frac{-5}{\sqrt{1}} = -5$$

✓

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$$HOP \xrightarrow{\frac{x}{\sqrt{x^2+1}} - \frac{-1}{\sqrt{x^2-1}}} \xrightarrow{\frac{x}{\sqrt{x^2+1}} - \frac{-1}{\sqrt{x^2-1}} \xrightarrow{x=0} \frac{0}{\sqrt{1}} - \frac{-1}{\sqrt{1}} = 1}$$

✓

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$$1 \rightarrow \text{منج} \rightarrow \text{مقسوم} \rightarrow k+1=0 \rightarrow k=-1$$

$$x \rightarrow \frac{-1 + (1 - \frac{ax^2}{x})}{-x^2} = x \rightarrow a=5 \rightarrow \frac{a}{k} = -5$$

✓

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$$1 \rightarrow \frac{x\sqrt{x+5a}}{(\sqrt{x-5a})(\sqrt{x+5a})} = \frac{x}{\sqrt{x+5a}} \xrightarrow{x=5a} \frac{5a}{\sqrt{10a}}$$

✓

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$$x \rightarrow \frac{x(\sqrt{x}-\sqrt{5a})}{(\sqrt{x-5a})(\sqrt{x+5a})} \times \frac{\sqrt{x}+\sqrt{5a}}{\sqrt{x}+\sqrt{5a}} = \frac{x\sqrt{x-5a}}{(\sqrt{x+5a})(\sqrt{x}+\sqrt{5a})}$$

0

$$x \rightarrow -1^+ \rightarrow \frac{1+k}{0^-} = -\infty \rightarrow 1+k > 0 \rightarrow k > -1$$

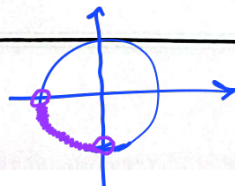
$$x \rightarrow -1^- \rightarrow \frac{1+2k}{0^+} = -\infty \rightarrow k < -\frac{1}{2}$$

$$-1 < k < -\frac{1}{2} \rightarrow (k\pi, \cos k\pi) = (\frac{1}{2}\pi, 0)$$

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$$-1 < k < -\frac{1}{2} \rightarrow \begin{cases} -\pi < k\pi < -\frac{\pi}{2} \\ -1 < \cos k\pi < 0 \end{cases}$$



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