

$$\lim_{x \rightarrow 1} \frac{x^2 - \sqrt{x} + 3}{2x^2 - 4x + 3} = \frac{0}{0} \rightarrow \frac{(x-1)(2x-3)}{(x-1)(2x-3)} = \boxed{\frac{1}{2}}$$

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$$\lim_{x \rightarrow 0} \frac{|3x-1| + 3x+1}{x} = \frac{0}{0} \rightarrow \frac{-3x+1 - 3x+1}{x} = \frac{-6x}{x} = \boxed{-6}$$

سوال ۲

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$$\lim_{x \rightarrow 2} \frac{x-2}{\sqrt{x}-2} = \frac{0}{0} \rightarrow \frac{x-2}{\sqrt{x}-2} \times \frac{\sqrt{x}+2}{\sqrt{x}+2} = \frac{(x-2)(\sqrt{x}+2)}{(x-2)} = \boxed{4}$$

سوال ۳

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$$\lim_{x \rightarrow 2} \frac{x - \sqrt{2x}}{2x^2 - x - 4} = \frac{0}{0} \rightarrow \frac{x - \sqrt{2x}}{2x^2 - x - 4} \times \frac{x + \sqrt{2x}}{x + \sqrt{2x}} = \frac{x(x-2)}{(2x^2 - x - 4)(x + \sqrt{2x})} = \frac{2}{2 \cdot 2} = \boxed{\frac{1}{2}}$$

سوال ۴

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$$\lim_{x \rightarrow 1} \frac{1 - \sqrt{x}}{2 - \sqrt{4-x}} = \frac{0}{0} \rightarrow \frac{1 - \sqrt{x}}{2 - \sqrt{4-x}} \times \frac{1 + \sqrt{x}}{1 + \sqrt{x}} \times \frac{2 + \sqrt{4-x}}{2 + \sqrt{4-x}} = \frac{(1-x)(2)}{(2-\sqrt{4-x})(2)} = \frac{-2}{(2-\sqrt{4-x})(2)} = \boxed{-2}$$

سوال ۵

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