

1 سوال (1)

$$\lim_{n \rightarrow 1} \frac{5n^2 - 7n + 3}{0n^2 - 1n + 1} = \frac{0}{0} \text{ hop}$$

$$\frac{10n - 7}{1 \cdot n - 1} = \frac{1}{2} \quad (5)$$

2 سوال (2)

$$\lim_{n \rightarrow 0} \frac{|3n-1| - |3n+1|}{n} = \frac{0}{0} \rightarrow \frac{-4n}{n} = -4 \quad (5)$$

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3 سوال (3)

$$\lim_{n \rightarrow 4} \frac{n-4}{\sqrt{n}-2} = \frac{0}{0} = \frac{(\sqrt{n}-2)(\sqrt{n}+2)}{(\sqrt{n}-2)} = \sqrt{n}+2 = 6 \quad (5)$$

4 سوال (4)

$$\lim_{n \rightarrow 2} \frac{n - \sqrt{2n}}{2n^2 - n - 4} \times \frac{n + \sqrt{2n}}{n + \sqrt{2n}} = \frac{n}{2n^2 - n - 4} = \frac{2}{2 \cdot 4 - 2 - 4} = \frac{1}{2} \quad (5)$$

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5 سوال (5)

$$\lim_{n \rightarrow 1} \frac{\sqrt{4n+4} - 4}{\sqrt{5n+7} - 3} = \frac{0}{0} = \frac{(4n+4-16) \times 2\sqrt{4n+4}}{(5n+7-9) \times 2\sqrt{4n+4}} = \frac{4n-12}{5n-2} = \frac{4}{3} \quad (5)$$

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6 سوال (6)

$$\lim_{n \rightarrow 1} \frac{1 - \sqrt{n}}{2 - \sqrt{5-n}} = \frac{0}{0} = \frac{(1-n) \times 2}{(2-\sqrt{5-n}) \times 2} = -2 \quad (5)$$

Subject: _____

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

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

سوال 1

$\frac{(4x+\sqrt{x}-4)^2}{(x-1)^2} = \frac{(4x-\epsilon-\sqrt{x})^2}{(4x-\epsilon-\sqrt{x})^2} = \frac{(4x-4)(x-1)^2}{(4x-\epsilon-\sqrt{x})^2} = \frac{4}{1}$

$\lim_{x \rightarrow \pi} \frac{1+\cos^2 x}{\sin^2 x} = \frac{0}{0} = \frac{(1+\cos x)(1+\cos^2 x)}{(1-\cos x)(1+\cos x)} = \frac{1-(-1)+1}{1-(-1)} = \frac{2}{2} = 1$

سوال 1

$\lim_{x \rightarrow \frac{\pi}{2}} \frac{1-\tan x}{\sin x - \cos x} = \frac{0}{0} = \frac{\cos x - \sin x}{\cos x} = \frac{1}{-1} = -1$

سوال 1

$\lim_{x \rightarrow \frac{\pi}{2}} \frac{\tan^2 x - 1}{\cos^2 x} = \frac{0}{0} = \frac{\sin^2 x - \cos^2 x}{\cos^2 x} = \frac{1}{-1} = -1$

سوال 1