

$\lim_{x \rightarrow 1^-} \frac{2x+5}{x+1} = \frac{2(1)+5}{1+1} = \frac{7}{2} = 3.5$	$\lim_{x \rightarrow 1^+} \frac{2x+5}{x+1} = \frac{7}{2} = 3.5$	۱۵
$\lim_{x \rightarrow 2} \frac{2x+7}{[x^2]} = \frac{11}{4}$	$\lim_{x \rightarrow 2} \frac{2x+7}{x+1} = \frac{11}{3}$	۱۵
$\lim_{x \rightarrow 3^-} [2x-2] = [12-2] = 10$	$\lim_{x \rightarrow 3^-} [x^2] \times 2 - 2 = 11 - 2 = 9$	۱۵
$\lim_{x \rightarrow 1^-} \left[\frac{3x+1}{2} \right] = \left[\frac{4}{2} \right] = [2] = 2$	$\lim_{x \rightarrow 1^-} \frac{3[x]+1}{2} = \frac{4}{2} = 2$	۱۵
$\lim_{x \rightarrow 1^-} \frac{3x+1}{2} = \frac{4}{2} = 2$	$\lim_{x \rightarrow 1^-} \frac{3x+1}{2} = \frac{4}{2} = 2$	۱۵
$\lim_{x \rightarrow 1^-} \frac{x-2}{x^2-9x+9} = \frac{-1}{-8} = \frac{1}{8}$	$\lim_{x \rightarrow 1^-} \frac{x-2}{x^2-9x+9} = \frac{-1}{-8} = \frac{1}{8}$	۱۵
$\lim_{x \rightarrow 1^-} \frac{x-2}{x^2-9x+9} = \frac{-1}{-8} = \frac{1}{8}$	$\lim_{x \rightarrow 1^-} \frac{x-2}{x^2-9x+9} = \frac{-1}{-8} = \frac{1}{8}$	۱۵
$\lim_{x \rightarrow 1^-} \frac{x-2}{x^2-9x+9} = \frac{-1}{-8} = \frac{1}{8}$	$\lim_{x \rightarrow 1^-} \frac{x-2}{x^2-9x+9} = \frac{-1}{-8} = \frac{1}{8}$	۱۵

$$\lim_{n \rightarrow -3} [-3n] - [5n] \rightarrow \lim_{n \rightarrow -3^+} [-3n] - [5n] = 1 - (-15) = 16$$

$$\lim_{n \rightarrow -3} [-3n] - [5n] = 1 - (-14) = 15$$

(ب) لکھو و مستحق رو لیکو لیم تری ملان قبل $\lim_{x \rightarrow 0} \frac{1}{x} = \infty$ $\lim_{x \rightarrow 0} [A] = \lim_{x \rightarrow 0} [x^2] = 0$ $\lim_{x \rightarrow 0} [x^-] = 0$ <u>حد ندارد</u>	(الف) $\lim_{x \rightarrow 1} [x^2 - 2x + 1] \rightarrow \frac{0}{0}$ $\lim_{x \rightarrow 1} \frac{1}{x^2 - 1} = \frac{1}{0}$ <u>حد ندارد</u> $\lim_{x \rightarrow 1} [A] = \lim_{x \rightarrow 1} [x] = 1$
(ب) $\lim_{x \rightarrow \pi} \frac{ \sin x }{\sin 2x} = \frac{0}{0}$ $\lim_{x \rightarrow \pi} \frac{1}{\sin 2x} = \frac{1}{0}$ <u>حد ندارد</u> $\lim_{x \rightarrow \pi} \frac{1}{\cos x} = \frac{1}{-1} = -1$	(الف) $\lim_{x \rightarrow 1} \frac{x^2 - 1}{x^2 - 2} = \frac{0}{-1} = 0$ $\lim_{x \rightarrow 1} \frac{1}{x^2 - 2} = \frac{1}{-1} = -1$ $\lim_{x \rightarrow 1} \frac{x^2}{x^2 - 2} = \frac{1}{-1} = -1$ <u>حد ندارد</u>
(ب) $\lim_{x \rightarrow \infty} \sqrt{x - 2\sqrt{x}}$ $\lim_{x \rightarrow \infty} \sqrt{x} = \infty$ $\lim_{x \rightarrow \infty} \sqrt{x} = \infty$ <u>حد ندارد</u>	(الف) $\lim_{x \rightarrow \frac{\pi}{2}} \sqrt{\cos x} = \sqrt{0} = 0$ $\lim_{x \rightarrow \frac{\pi}{2}} \sqrt{0} = 0$ <u>حد ندارد</u>
(ب) $\lim_{x \rightarrow 1} \frac{x^2 - [x^2]}{x - [x]} = \frac{0}{0}$ $\lim_{x \rightarrow 1} \frac{x^2 - 1}{x - 1} = \frac{0}{0} = 1$ $\lim_{x \rightarrow 1} \frac{x^2}{x - 1} = \frac{1}{0} = \infty$ <u>حد ندارد</u>	(الف) $\lim_{x \rightarrow 0^+} \frac{(-1)^{[x]}}{x^2 - x^2} = \frac{0}{0}$ $\lim_{x \rightarrow 0^+} \frac{1}{x^2(x-1)} = \frac{1}{0} = \infty$ $\lim_{x \rightarrow 0^+} \frac{1}{x^2 - 1} = -\infty$ <u>حد ندارد</u>
$y' = 2x^2 - 2x + 0 = 2x(x-1)$ $y' = 2x^2 - 2x + 0 = 2x(x-1)$	$y' = 18x^2 - 18x^2 = 0$ $y' = 18x^2 - 18x^2 = 0$

خسته نباشی قربان...