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سوال (1) - بازنده و ...

الف)  $\lim_{n \rightarrow \infty} \epsilon n - 3 = a$

ب)  $\lim_{n \rightarrow \infty} \epsilon n - a = a$

سوال (1) سوال (1) سوال (1)

الف)  $\lim_{n \rightarrow \infty} \epsilon [n] - 3 \xrightarrow{n^+} [n^+] = n \rightarrow a$   
 $\xrightarrow{n^-} [n^-] = n - 1 \rightarrow 1$

سوال (2) سوال (2) سوال (2)

الف)  $\lim_{n \rightarrow \infty} [\epsilon n - a] \xrightarrow{n^+} [a^+] = a$   
 $\xrightarrow{n^-} [a^-] = a - 1$

سوال (3) سوال (3) سوال (3)

الف)  $\left[ \lim_{n \rightarrow \infty} \epsilon n - a \right] = a$

سوال (4) سوال (4) سوال (4)

الف)  $\lim_{n \rightarrow \infty} \frac{\epsilon n - 3}{n - 3} \xrightarrow{n^+} \frac{a}{0^+} = +\infty$   
 $\xrightarrow{n^-} \frac{a}{0^-} = -\infty$

سوال (5) سوال (5) سوال (5)

ب)  $\lim_{n \rightarrow \infty} \frac{\epsilon n - a}{(n - 3)^2} \xrightarrow{n^+} \frac{a}{0^+} = +\infty$   
 $\xrightarrow{n^-} \frac{a}{0^-} = +\infty$

سوال (6) سوال (6) سوال (6)

الف)  $\lim_{n \rightarrow \infty} \frac{\epsilon n - a}{\sqrt{n - 3}} \xrightarrow{n^+} \frac{a}{\sqrt{0^+}} = +\infty$   
 $\xrightarrow{n^-} \frac{a}{\sqrt{0^-}} = 0 \pm$

سوال (7) سوال (7) سوال (7)

ب)  $\lim_{n \rightarrow \infty} \frac{\epsilon n - a}{\sqrt{n^2 - \epsilon n + a}} \xrightarrow{n^+} \frac{a}{\sqrt{0^+}} = +\infty$   
 $\xrightarrow{n^-} \frac{a}{\sqrt{0^-}} = 0 \pm$

سوال (8) سوال (8) سوال (8)

الف)  $\lim_{n \rightarrow \infty} \frac{\epsilon n - 3}{n^2 - \sqrt{n+1} + 1} \xrightarrow{n^+} \frac{a}{0^-} = -\infty$   
 $\xrightarrow{n^-} \frac{a}{+\infty} = +\infty$

سوال (9) سوال (9) سوال (9)

Arman

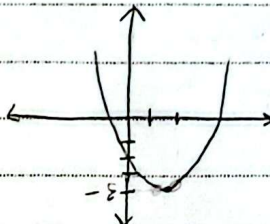
ب)  $\lim_{n \rightarrow 0} \frac{\varepsilon n - 0}{[n - 0]}$   $\begin{matrix} \nearrow \\ \searrow \end{matrix}$   $\begin{matrix} \frac{0}{0} = 0 \\ \frac{0}{-1} = -0 \end{matrix}$  حل

ا)  $\lim_{n \rightarrow 0} [2n] + [-n]$   $\begin{matrix} \nearrow \\ \searrow \end{matrix}$   $\begin{matrix} 0 + (-0) = 0 \\ 1 - 0 = 1 \end{matrix}$  حل

ب)  $\lim_{n \rightarrow -2} [-\varepsilon n] + [2n]$   $\begin{matrix} \nearrow \\ \searrow \end{matrix}$   $\begin{matrix} 2\varepsilon - 1\varepsilon = \varepsilon \\ 2(-2) - 1(-2) = -4 + 2 = -2 \end{matrix}$  حل

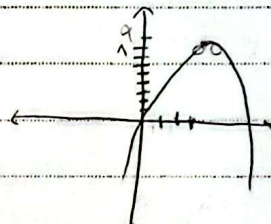
ا)  $\lim_{n \rightarrow 2} [n^2 - \varepsilon n] = -\varepsilon$   $\rightarrow$  حل (90)

$\begin{matrix} \searrow \\ \nearrow \end{matrix}$   $\begin{matrix} -\frac{b}{2a} = \frac{\varepsilon}{2} = 2 \\ -\varepsilon \end{matrix}$



ب)  $\lim_{n \rightarrow 0} [-n^2 + 4n] = 1$   $\rightarrow$  حل (5)

$\begin{matrix} \searrow \\ \nearrow \end{matrix}$   $\begin{matrix} -\frac{b}{2a} = c \\ a \end{matrix}$



ا)  $\lim_{n \rightarrow 2} \frac{|n-2|}{n^2 - n + 2}$   $\rightarrow \frac{0}{0}$   $\begin{matrix} \nearrow \\ \searrow \end{matrix}$   $\begin{matrix} \frac{n-2}{(n-2)(n-1)} = 1 \\ \frac{2-n}{(n-2)(n-1)} = -1 \end{matrix}$  حل

ب)  $\lim_{n \rightarrow 1} \frac{n - [n]}{n^2 - 1}$   $\begin{matrix} \nearrow \\ \searrow \end{matrix}$   $\begin{matrix} \frac{n-1}{(n+1)(n-1)} = \frac{1}{n+1} \\ \frac{n-0}{n^2-1} = \frac{1}{n^2-1} = \frac{1}{0} = -\infty \end{matrix}$  (5)