

سوال (1) - بازنده و منفی A

الف)  $\lim_{n \rightarrow \infty} \varepsilon n - \mu = a$

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

سوال (1)  
سوال (1)

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

سوال (2)  
سوال (2)

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

سوال (3)  
سوال (3)

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

سوال (4) سوال (4)

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

$\frac{c}{-|+}$

سوال (5)  
سوال (5)

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

$\frac{c}{+|+}$

سوال (6)  
سوال (6)

الف)  $\lim_{n \rightarrow \infty} \frac{\varepsilon n - a}{\sqrt{n - \mu}} \xrightarrow{\mu^+} \frac{a}{\sqrt{0^+}} = +\infty$   
 $\xrightarrow{\mu^-} \frac{a}{\sqrt{0^-}} = \text{undefined}$

سوال (4)  
سوال (4)

ب)  $\lim_{n \rightarrow \infty} \frac{\varepsilon n - a}{\sqrt{n^2 - \varepsilon n + c}} \xrightarrow{a^+} \frac{a}{\sqrt{0^+}} = +\infty$   
 $\xrightarrow{a^-} \frac{a}{\sqrt{0^-}} = \text{undefined}$

$\frac{1}{+|-|+}$

سوال (7)  
سوال (7)

الف)  $\lim_{n \rightarrow \infty} \frac{\varepsilon n - \mu}{(n - \mu)(n - \mu)} \xrightarrow{a^+} \frac{a}{0^-} = -\infty$   
 $\xrightarrow{a^-} \frac{a}{+\infty} = 0$

$\frac{a}{+|-|+}$

سوال (7)  
سوال (7)

Arman

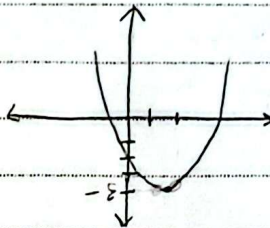
ب)  $\lim_{n \rightarrow 0} \frac{\varepsilon n - 0}{[n - 0]}$   $\begin{matrix} \nearrow 0^+ & \frac{0}{0} = 0 \\ \searrow 0^- & \frac{0}{-1} = -0 \end{matrix}$  مساوي

د)  $\lim_{n \rightarrow 0} [2n] + [-2n]$   $\begin{matrix} \nearrow 0^+ & 0 + (-0) = 0 \\ \searrow 0^- & 1 - 0 = 1 \end{matrix}$  مساوي (1.0) مساوي

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

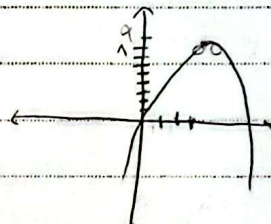
الف)  $\lim_{n \rightarrow 2} [n^2 - \varepsilon n] = -\varepsilon$  مساوي (9.0) مساوي

$y = -\frac{b}{2a} \pm \frac{\varepsilon}{2}$



ب)  $\lim_{n \rightarrow 0} [-n^2 + 4n] = 0$  مساوي

$y = -\frac{b}{2a} \pm \frac{c}{a}$



الف)  $\lim_{n \rightarrow 2} \frac{|n-2|}{n^2 - 2n + 2}$   $\begin{matrix} \nearrow 2^+ & \frac{0}{0} \text{ (L'Hopital)} & \frac{n-2}{(n-2)(n-1)} = 1 \\ \searrow 2^- & & \frac{2-n}{(n-2)(n-1)} = -1 \end{matrix}$  مساوي

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