

نام و نام خانوادگی علی محمدی پاسخنامه تشریحی تکلیف شماره ۱.۸ کلاس B

$$\lim_{r \rightarrow -1} \frac{f(r) + a}{r + 1} = \boxed{f'}$$

$$V_m \frac{V(r^*) + \omega}{r^* + 1} = \boxed{r^*}$$

(الف)

$$\lim \frac{V(0) + V}{[0^r]} = \frac{0}{0}$$

(5)

$$\lim_{n \rightarrow \infty} \frac{r_{n+1}}{r_n} = \frac{r + 0}{r} = \mu$$

12.

$$\lim_{x \rightarrow 9} [f(x^-) - x] = 9$$

6.

$$\lim_{r \rightarrow 0} f(r^-) - r = 9$$

(الف)

$$\lim_{n \rightarrow \infty} (n-1) = 10$$

6

$$[\lim_{n \rightarrow \infty} (x_n - y_n)] = 10$$

(2)

$$\lim_{x \rightarrow 1^-} \left[\frac{x^{n+1}}{x} \right] = \lim \left[\frac{9+1}{x} \right] = \lim [\Delta^-] (\checkmark)$$

$$\lim_{x \rightarrow 1} \frac{x^2 - 1}{x - 1} = \frac{0}{0}$$

الف)

$$\left[\lim_{n \rightarrow \infty} \frac{r_{n+1}}{r} \right] = \boxed{0}$$

10

$$\left[\lim_{r \rightarrow 0} \frac{\psi(r)+1}{r} \right] = \boxed{a} = \boxed{a} \quad \text{Q.}$$

$$\lim_{n \rightarrow 9^+} \frac{n-9}{n^2-4n+9} = \frac{-1}{0^+} = -\infty \quad (✓)$$

$$1^+ \rightarrow \frac{1^+ - \infty}{1^+ - \infty + 1} = \frac{0 - \infty}{0^+} = -\infty \quad (\text{الف})$$

$$1^- \rightarrow \frac{1^- - \omega}{1^- - \eta^+ + \omega} = \frac{-f^-}{0^-} = +\infty$$

2

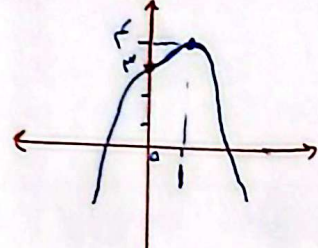
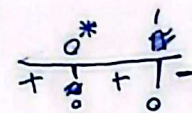
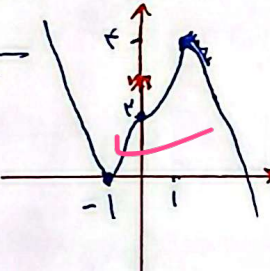
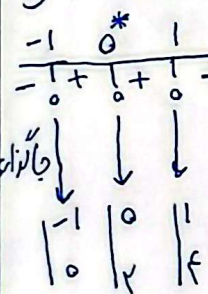
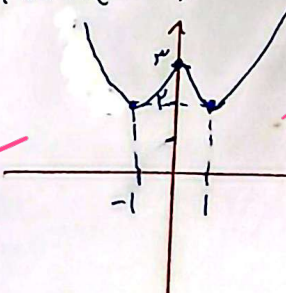
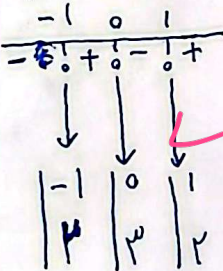
$$\lim_{x \rightarrow (-\frac{1}{19})^-} \left[\frac{-1}{\frac{1}{19}} \right] = -19$$

(.)

$$\begin{aligned} \xrightarrow{-r_1} [-r_1] - [a_1] &= 9 + 15 = 24 \quad (f) \\ \xrightarrow{-r_2} [-r_2] - [a_2] &= 1 + 10 = 11 \end{aligned}$$

$$-r \rightarrow [-r] - [a] = \wedge + 1a = r$$

חנה

اسم شکل دیگر مشتق $12n^2 - 12n^3 = 12n^2(1 - n)$  	الف $\lim_{n \rightarrow 1} [4n^3 - 3n^2 + 3] = 4$ حد ندارد	۶
ب $\lim_{n \rightarrow \pi} \frac{ \sin n }{\pi \sin n \cos n}$ $\xrightarrow{\pi^+} \frac{1}{\pi \cos n} = \frac{1}{\pi}$ $\xrightarrow{\pi^-} \frac{1}{\pi \cos n} = -\frac{1}{\pi}$ حد ندارد	الف $\lim_{n \rightarrow 2} \frac{(n-2)(n^2+4n+4)}{(n-2)(n+2)}$ $\xrightarrow{2^+} \frac{n^2+4n+4}{n+2} = 3$ $\xrightarrow{2^-} -\frac{(n^2+4n+4)}{n+2} = -3$ حد ندارد	۷
ب $\lim_{n \rightarrow 0} \sqrt{n - 2\sqrt{n}}$ $\xrightarrow{0^+} 0$ $\xrightarrow{0^-} \text{تین}$ حد ندارد	الف $\lim_{n \rightarrow \frac{\pi}{2}} \sqrt{\cos n}$ تین ۱، ۲، ۵ حد ندارد	۸
ب $\lim_{n \rightarrow 2} \frac{n^2 - [n^2]}{n - [n]}$ $\xrightarrow{2^+} \frac{n^2 - 4}{n - 2} = n + 2 = 4$ $\xrightarrow{2^-} \frac{n^2 - 3}{n - 1} = 1$ حد ندارد	الف $\lim_{n \rightarrow 0^+} \frac{(-1)^{[\sin n]}}{n^3 - n^2} = \frac{-1^0}{0^+} = \frac{1}{0^+} = +\infty$ حد ندارد	۹
الف $y' = 10n^2 - 10n^3 = 10n^2(1 - n)$  	ب $y' = 4n^3 - 4n = 4n(n^2 - 1)$  	۱۰

سوال ۱ - ب

$$n - 2\sqrt{n} \geq 0 \rightarrow \sqrt{n}(\sqrt{n} - 2) \geq 0 \quad \text{II}$$

$\downarrow$
 $n \geq 0 \quad \text{I}$

$\sqrt{n} \leq 2$
 $\Rightarrow n \leq 4$

I $\wedge$ II $n = 0 \leq n \leq 4 \rightarrow$ عبارات فوقه تعریف نمیشود

$$\lim_{n \rightarrow 0} \sqrt{n - 2\sqrt{n}} = \text{X}$$