

(ايرجى وجيب) (Ard) اب

19,5

الف ه ✓

اب ه ✓

(2) - 1

الف ه ✓

اب ا ✓

(2) - 2

الف ه ✓

اب ك ✓

(2) - 3

الف ه ✓

اب د ✓

(2) - 4

الف) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9}{0^+} = +\infty \\ \lim_{x \rightarrow 0^-} \frac{9}{0^-} = -\infty \end{cases}$

اب) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9}{0^+} = +\infty \\ \lim_{x \rightarrow 0^-} \frac{9}{0^-} = +\infty \end{cases}$

(2) - 5

الف) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9}{0^+} = +\infty \\ \lim_{x \rightarrow 0^-} \frac{9}{\sqrt{0^-}} = \text{تن} \end{cases}$

اب) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9}{\sqrt{(x-3)(x-1)}} = \frac{9}{0^+} = +\infty \\ \lim_{x \rightarrow 0^-} \frac{9}{\sqrt{0^-}} = \text{تن} \end{cases}$

(2) - 6

الف) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9}{(x-3)(x-1)} = \frac{9}{0^-} = -\infty \\ \lim_{x \rightarrow 0^-} \frac{9}{0^+} = +\infty \end{cases}$

اب) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9}{0} = \text{تن} \\ \lim_{x \rightarrow 0^-} \frac{9}{-1} = -9 \end{cases}$

(2) - 7

الف) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{9-7}{1} = 2 \\ \lim_{x \rightarrow 0^-} \frac{8-9}{1} = 2 \end{cases}$

اب) $\begin{cases} \lim_{x \rightarrow 0^+} \frac{2^3-12}{6} = 11 \\ \lim_{x \rightarrow 0^-} \frac{2^4-13}{6} = 11 \end{cases}$

(1,5) - 8

الف) - 4 ✓

اب) 8 ✓

(2) - 9

$(x-2)^2 > 0 \Rightarrow x^2 + 4 - 4x > 0$
 $x^2 - 4x > -4$

$-(x^2 - 4x)$
 $(x-2)^2 > 0 \Rightarrow x^2 + 4 - 4x > 0$
 $x^2 - 4x > -4$
 $4x - x^2 < 4$

الف) $\begin{cases} \lim_{x \rightarrow 1^+} \frac{x-2}{(x+2)(x-1)} = \frac{1}{1} = 1 \\ \lim_{x \rightarrow 1^-} \frac{-(x-2)}{(x+2)(x-1)} = \frac{-1}{1} = -1 \end{cases}$

اب) $\begin{cases} \lim_{x \rightarrow 1^+} \frac{x-1}{(x-1)(x+1)} = \frac{1}{2} \\ \lim_{x \rightarrow 1^-} \frac{x}{x^2-1} = \frac{1}{0^-} = -\infty \end{cases}$

(2) - 10