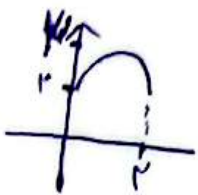


19

الف)



ب)



ج)



د)



پ ✓

الف) $(m-2)(m-3) > 0$ $(-\infty, 2) \cup (3, +\infty)$

ب) $(m-1)(m-5) < 0$ $(1, 5)$ پ ✓

ج) $m^2 + 5m + 8 \geq 0$ $(m+1)(m+8)$ $(-\infty, -8] \cup [-1, +\infty)$

د) $(m-1)(m-9) \leq 0$ $[1, 9]$

الف) $\frac{(m-1)(m-2)}{m-5} < 0$ $(-\infty, 1) \cup (2, 5)$

ب) $\frac{(m+1)(m-1)}{(m-1)(m-5)} \geq 0$ $(-\infty, -1] \cup (5, +\infty)$ پ ✓

الف) $\frac{(m-1)(m^2+m+1)}{m(m-1)(m+1)} \geq 0$ $Df = (-\infty, -1) \cup (0, +\infty)$ 117

ب) $\frac{(m-4)(m+4)}{(m-1)(m-4)} \geq 0$ $Df = (-\infty, -4] \cup (1, +\infty)$ 115 117

الف) $2-m \geq 0 \Rightarrow m \leq 2$, $4-\sqrt{2-m} \geq 0 \Rightarrow 16 \geq 2-m \Rightarrow -14 \leq m$
 $Df = [-14, 2]$ پ ✓

ب) $m-2 \geq 0 \Rightarrow m \geq 2$, $9-\sqrt{m-2} \geq 0 \Rightarrow 81 \geq m-2 \Rightarrow 83 \geq m$
 $Df = [2, 83]$

الف) $4 - 2m^2 \geq 0 \rightarrow m^2 \leq 2 \rightarrow -\sqrt{2} \leq m \leq \sqrt{2}$
 $Df = [-\sqrt{2}, \sqrt{2}]$

ب) $3|m| - 9 \geq 0 \quad |m| \geq 3 \rightarrow$ $m \geq 3$
 $m \leq -3$
 $-3 \leq m \leq 3 \quad \{-3, 3\} = Df$

الف) $|m| - 3 \neq 0 \rightarrow Df = R - \{-3, 3\}$

ب) $\sqrt{m} - 3 \neq 0, m \geq 0 \rightarrow Df = [0, +\infty) - \{9\}$

الف) $2 \cos m - 1 \neq 0 \rightarrow \cos m \neq \frac{1}{2} \quad Df = R - \{k\pi \pm \frac{\pi}{3}\}$

ب) $2 \sin m + 1 \neq 0 \rightarrow \sin m \neq -\frac{1}{2} \quad Df = R - \{k\pi - \frac{\pi}{6}, k\pi + \frac{5\pi}{6}\}$

2) $\cot m - 1 \neq 0 \rightarrow \cot m \neq 1 \quad Df = R - \{k\pi, k\pi + \frac{\pi}{4}\}$

3) $2 \sin^2 m - 3 \neq 0 \quad \sin m \neq \pm \frac{\sqrt{3}}{2} \quad Df = R - \{k\pi + \frac{\pi}{3}, k\pi + \frac{2\pi}{3}\}$

$2|m-2| - \frac{1}{p} > 0 \rightarrow 2|m-2| > \frac{1}{p} \quad |m-2| > \frac{1}{2p}$

$\frac{1}{2p} \quad \frac{1}{2p}$
 $+\quad - \quad +$
 $(-\infty, \frac{1}{2p}) \cup (\frac{1}{2p}, +\infty)$

الف) $y = \sqrt{4 - 2|m|} \rightarrow 4 - 2|m| \geq 0 \quad |m| \leq 2 \rightarrow$
 $-2 \leq m \leq 2 \rightarrow Df = [-2, 2]$

$y = \sqrt{\frac{|m|}{|m|+1}} \quad \frac{|m|}{|m|+1} = 1 \rightarrow$
 آنگاه صفر باشد صفر می دهد و صفر در خیزش نمی شود
 $Df = R - \{0\}$