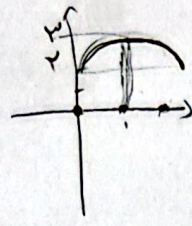
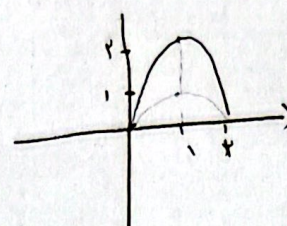
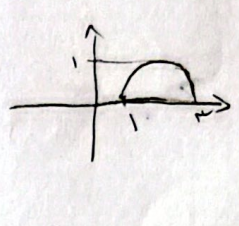
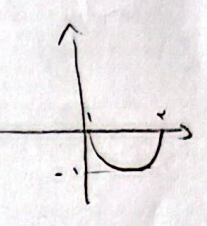


۱ الف 	ب 	ج 	د 
الف = $(x-5)(x+1) > 0 \Rightarrow$ $x = (x-1)(x-5) =$	$\Rightarrow (-\infty, -1) \cup (4, +\infty)$ $\Rightarrow (1, 5)$	$\Rightarrow (-\infty, -5] \cup [-1, +\infty)$ $\Rightarrow [1, 6]$	۱
الف = $\frac{(x-1)(x-2)}{(x-5)}$	$\Rightarrow (-\infty, 1) \cup (2, 5)$	$\Rightarrow (-\infty, -1] \cup [5, +\infty)$	۲
الف = $\frac{x^3-1}{x^3-x} > 0 = \frac{(x+1)(x^2-x+1)}{x(x^2-1)} = \frac{(x+1)(x^2-x+1)}{x(x-1)(x+1)}$	$\Rightarrow (-\infty, -1) \cup (1, +\infty)$	$\Rightarrow (-\infty, -1] \cup [5, +\infty)$	۳
الف = $\frac{x^2-1}{x^2-5x+4} > 0 = \frac{(x-1)(x+1)}{(x-1)(x-4)}$	$\Rightarrow (-\infty, -4] \cup [1, +\infty)$	$\Rightarrow (-\infty, -4] \cup [1, +\infty)$	۴
الف = $\frac{x^2-1}{x^2-5x+4} > 0 = \frac{(x-1)(x+1)}{(x-1)(x-4)}$	$\Rightarrow (-\infty, -4] \cup [1, +\infty)$	$\Rightarrow (-\infty, -4] \cup [1, +\infty)$	۵

$$\cos = \epsilon - r \cos^2 > 0 \Rightarrow r \cos^2 \leq \epsilon \Rightarrow m^2 \leq r \Rightarrow m \leq \sqrt{r} \Rightarrow (-\infty, \sqrt{r}]$$

$$\psi = r|m| - q > 0 \Rightarrow r|m| > q \Rightarrow |m| > \frac{q}{r} \Rightarrow [r, +\infty) \cup [-r, -\infty)$$

$$\omega \Rightarrow |m| - r \neq 0 \Rightarrow |m| \neq r \Rightarrow \mathbb{R} - [\pm r]$$

$$\beta \Rightarrow \textcircled{1} \Rightarrow m \geq 0$$

$$\textcircled{2} = \sqrt{m} - r \neq 0 \Rightarrow \sqrt{m} \neq r \Rightarrow m \neq q \} [0, +\infty) - q$$

$$\omega \Rightarrow r \cos m - 1 \neq 0 \Rightarrow r \cos \neq 1 \Rightarrow \cos \neq \frac{1}{r} \Rightarrow \mathbb{R} - [rk \pm \frac{\pi}{r}]$$



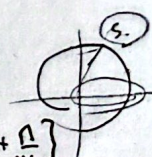
$$\psi \Rightarrow r \sin m + 1 \neq 0 \Rightarrow \sin m \neq -\frac{1}{r} \Rightarrow \mathbb{R} - [r, 0, r, 0]$$



$$\zeta \Rightarrow \textcircled{1} + \frac{\sin}{\cos} \Rightarrow \cos \neq 0 \Rightarrow \{k\pi + \frac{\pi}{2}\}$$

$$\textcircled{2} \Rightarrow \cot m - 1 \neq 0 \Rightarrow \cot m \neq 1 \Rightarrow \mathbb{R} - [8k\pi + \frac{\pi}{4}, k\pi]$$

$$\zeta \Rightarrow \epsilon \sin^2 m - r \neq 0 \Rightarrow \sin^2 m \neq \frac{r}{\epsilon} \Rightarrow \sin m \neq \frac{\sqrt{r}}{\epsilon} \Rightarrow \mathbb{R} - [k\pi + \frac{\pi}{2}]$$



$$r|m - r| - \frac{1}{r} > 0 \Rightarrow |m - r| > \frac{1}{r^2} \Rightarrow$$

$$m - r > \frac{1}{r^2} \Rightarrow m > \frac{1}{r^2} + r \Rightarrow m > \frac{q}{r}$$

$$m - r < -\frac{1}{r^2} \Rightarrow m < -\frac{1}{r^2} + r \Rightarrow m < \frac{r}{r^2}$$

$$r \in [\frac{1}{r^2}, \frac{q}{r}]$$

$$\omega = \epsilon \cdot r|m| > 0 \quad r|m| \leq r \Rightarrow |m| \leq r \Rightarrow m \leq r, \quad m \geq -r$$

$$[-r, r]$$

$$\psi \Rightarrow \sqrt{|m|} \rightarrow \mathbb{R}$$

$$\sqrt{|m|} \rightarrow |m| > 0 = \mathbb{R} - \{0\}$$