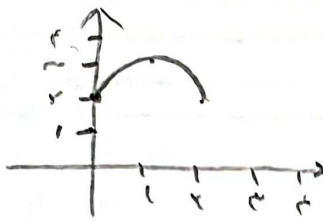
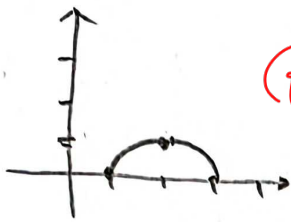


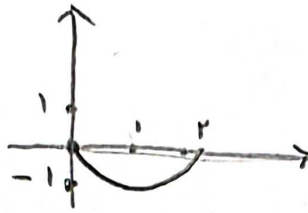
الف) $y = f(m+2)$



ج)



✓



الف) $n^2 - 5n + 4 > 0$ $(n-4)(n-1) > 0$ $D_f = \mathbb{R} - [1, 4]$

ب) $n^2 - 6n + 5 < 0$ $(n-5)(n-1) < 0$ $D_f = (1, 5)$

ج) $(n+1)(n+5) \geq 0$ $D_f = (-\infty, -5] \cup [-1, +\infty)$

د) $(n-1)(n-6) \leq 0$ $D_f = [1, 6]$

الف) $\frac{(n^2-2)(n-1)}{(n-5)} < 0$ $D_f = (-\infty, 1) \cup (2, 5)$

ب) $\frac{(n-1)(n+1)}{(n-1)(n-5)} \geq 0$ $D_f = (-\infty, -1] \cup (5, +\infty)$

رایکال صحتن:

الف) $y = \frac{\sqrt{n^2-1}}{\sqrt{n^2-n}} \Rightarrow n^2-1 \geq 0 \Rightarrow n^2 \geq 1 \Rightarrow n \geq 1$ $D_f = [1, +\infty)$

ب) $y = \frac{\sqrt{n^2-14}}{\sqrt{n^2-5n+4}} \Rightarrow (n-4)(n+4) \geq 0$ $D_f = (-\infty, -4] \cup [4, +\infty)$

الف) $y = \sqrt{4-n} - \sqrt{2-n} \Rightarrow 4-n \geq 0 \Rightarrow n \leq 4$ $2-n \geq 0 \Rightarrow n \leq 2$ $D_f = (-1, 2]$

ب) $y = \sqrt{2-n} - \sqrt{n-4} \Rightarrow n-4 \geq 0 \Rightarrow n \geq 4$ $2-n \geq 0 \Rightarrow n \leq 2$ $D_f = [4, 11]$

الف) $\sqrt{r - rm^2}$ $|r - rm^2| \geq 0$ $r - m^2 \geq 0$ $-\sqrt{r} \leq m \leq \sqrt{r}$ -9
 $\Rightarrow r/m^2 - 9 \geq 0$ $r/m^2 \geq 9$ $|m| \geq \sqrt{r}$ $D_f = [-\sqrt{r}, \sqrt{r}]$ $\textcircled{P}$ ✓ $r \leq r$

$\Rightarrow r/m^2 - 9 \geq 0$ $r/m^2 \geq 9$ $|m| \geq \sqrt{r}$ $D_f = (-\infty, -\sqrt{r}] \cup [\sqrt{r}, +\infty)$

الف) $y = \frac{\sqrt{|m|+1}}{\sqrt{|m|-r}}$ $\Rightarrow |m|-r \neq 0$ $|m| \neq r$ $D_f = \mathbb{R} - \{\sqrt{r}, -\sqrt{r}\}$ -9

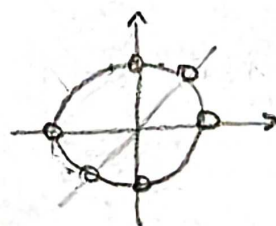
$\Rightarrow m \geq 0$ $\sqrt{m-r} \neq 0$ $m \neq r$ $D_f = \mathbb{R} - \{r\}$ $\textcircled{+}$ l, v, b

الف) $\frac{\sin m}{r \cos m - 1}$ $r \cos m - 1 \neq 0$ $\cos m \neq \frac{1}{r}$ -9
 $D_f = \mathbb{R} - \left\{ rK\pi - \frac{\pi}{2}, rK\pi + \frac{\pi}{2} \right\}$

$\Rightarrow r \sin m + 1 \neq 0$ $\sin m \neq -\frac{1}{r}$ $D_f = \mathbb{R} - \left\{ rK\pi - \frac{\pi}{4}, rK\pi + \frac{\pi}{4} \right\}$ $\textcircled{v}$

ج) $\frac{\sin m + r}{\cos m - r}$ $\cos m \neq 0$ $\mathbb{R} - \left\{ K\pi + \frac{\pi}{2} \right\}$ l, b
 $\frac{\cos m + r}{\sin m - r}$ $\sin m \neq 0$ $\cot m \neq \frac{1}{r}$

$D_f = \mathbb{R} - \left\{ K\pi, K\pi + \frac{\pi}{2}, K\pi + \frac{\pi}{r} \right\}$



$\Rightarrow r \sin^2 m - r \neq 0$ $r \sin^2 m \neq r$ $\sin^2 m \neq 1$ $\sin m \neq \pm 1$ $\textcircled{+}$

$D_f = \mathbb{R} - \left\{ rK\pi + \frac{\pi}{2}, rK\pi + \frac{3\pi}{2} \right\}$ $\{K\pi \pm \frac{\pi}{2}\}$

$r|m-r| - \frac{1}{r} > 0$ $r|m-r| > \frac{1}{r}$ $|m-r| > \frac{1}{r^2}$ -9
 $\textcircled{P}$ ✓ $m-r > \frac{1}{r^2}$ $-m+r > \frac{1}{r^2}$ $D_f = (-\infty, 1/r^2) \cup (r/r^2, +\infty)$

الف) $r - r|m| \geq 0$ $r|m| \leq r$ $|m| \leq 1$ $D_f = [-1, 1]$ $(11$

$\Rightarrow \frac{\sqrt{|m|}}{\sqrt{|m|}} \Rightarrow |m| \geq 0$ $|m| > 0$ $D_f = \mathbb{R} - \{0\}$ $\textcircled{P}$ ✓

ك- الف)

$$\frac{(n-1)(n^2+n+1)}{n(n-1)(n+1)} \geq 0 \rightarrow \frac{-1 \quad 0 \quad 1^*}{+ \quad - \quad + \quad +}$$

$$\frac{(n-5)(n+5)}{(n-1)(n-5)} \geq 0 \rightarrow \frac{-5 \quad 1 \quad 5^*}{+ \quad - \quad + \quad +}$$

ج