

نام و نام خانوادگی فاطمه شریانی پاسخنامه تشریحی تکلیف شماره ۶ ... کلاس ... (هم) ... (درج) ...

الف) $m^2 - 4m \rightarrow m(m-4)$
 $m^2 - m \rightarrow (m+1)(m-1)(m)$

$\frac{-1}{-1} + \frac{0}{0} + \frac{1}{1} + \frac{4}{4} +$ (۲) ✓

$D_f = (-1, 0) \cup (0, 1) \cup [4, \infty)$

ب) $m^2 - m^2 \rightarrow m^2(m^2 - 1) \rightarrow m^2(m-1)(m+1)$
 $m^2 - m \rightarrow m(m+1)(m-1)$

$\frac{-1}{-1} + \frac{0}{0} + \frac{1}{1} + \frac{1}{1} +$ (۲) ✓

$D_f = (-\infty, -1) \cup (-1, 0) \cup (0, 1) \cup (1, \infty)$

الف) $m + |m| > 0$
 $m < 0 \Rightarrow m - m > 0 \Rightarrow 0 > 0 \Rightarrow \alpha$
 $m > 0 \Rightarrow m > 0$
 $R = \{0\}$

$D_f = m > 0$ (۲) ✓

ب) $m|m| > 0$
 $m < 0 \Rightarrow -m^2 > 0 \Rightarrow$ غلط
 $m > 0 \Rightarrow m^2 > 0$
 $R = \{0\}$

$D_f = m > 0$

الف) $2 - [m] \geq 0$
 $2 \geq [m]$
 $D_f = (-\infty, 2)$

ب) $2 - [m] > 0$
 $2 > [m]$
 $D_f = (-\infty, 2)$ (۲) ✓

الف) $[m + \frac{2}{3} - 1] + [m + \frac{2}{3}] \geq 0$
 $2[m + \frac{2}{3}] \geq 1$
 $[m + \frac{2}{3}] \geq \frac{1}{2}$
 $m + \frac{2}{3} \geq 1 \rightarrow m \geq \frac{1}{3}$ (۲) ✓

ب) $[m - \frac{1}{3}] + [-(m - \frac{1}{3})] \geq 0$
 $\{ \text{if } a \in \mathbb{Z} \Rightarrow [a] + [-a] = 0$
 $a \notin \mathbb{Z} \Rightarrow [a] + [-a] = -1$

$m - \frac{1}{3} \in \mathbb{Z} \text{ و } m \in \mathbb{Z} + \frac{1}{3}$

الف) $\sin m - 1 \neq 0$
 $\sin m \neq 1$

$D_f = R - \{2k\pi + \frac{\pi}{2}\}$

ب) $2 \sin^2 m \neq 1$
 $\sqrt{\sin^2 m} \neq \frac{1}{\sqrt{2}}$
 $\sin m \neq \pm \frac{1}{\sqrt{2}} \Rightarrow D_f = R - \{k\pi \pm \frac{\pi}{4}\}$



ا) $r \sin m > 0$ $r \sin m > 1$ $\sin m > \frac{1}{r}$ $\rightarrow [r k \pi + \frac{\pi}{2}, r k \pi + \frac{3\pi}{2}]$ D_f:  $\checkmark$	$\cos m > 0$ $\cos m > 1$ $D_f: \{r k \pi\}$ 6
ا) $-1 \leq m - r \leq 1$ $r \leq m \leq r$ $D_f = [-r, r] \cup [r, r]$ <u>1, 2, 3</u>	$-1 \leq m^r + r_{m+1} \leq 1$ $\rightarrow -1 \leq m^r + r_{m+1} \rightarrow 0 \leq m^r + r_{m+1} + r$ $\rightarrow 0 \leq (m+r)(m+1) \rightarrow m \leq -r$ <u>1, 2, 3</u> $\rightarrow m^r + r_{m+1} \leq 1 \rightarrow m(m+r) \leq 0 \rightarrow -r \leq m \leq 0$ <u>1, 2, 3</u> $D_f = [-r, -r] \cup [-1, 0]$ <u>1, 2, 3</u>
ا) $(m-r) > 0$ $m > r$ $r - \log_r(m-r) > 0$ $r \geq \log_r(m+r)$ $r \geq m-r \rightarrow m \geq m$ <u>1, 2, 3</u> $D_f = r < m \leq 11$ $(r, 11]$ $\checkmark$	$m^r - m > 0$ $m(m+1)(m-1) > 0$ $\frac{-1}{-} \frac{0}{+} \frac{1}{-} \frac{+}{+}$ $D_f = (-1, 0) \cup (1, +\infty)$ 1
ا) $r^m + 1 \neq 0$ $r^m \neq -1$ $D_f = \mathbb{R}$ ب) $r^m - 1 \neq 0$ $r^m \neq 1$ $m \neq 0$ $D_f = \mathbb{R} - \{0\}$ ج) $r^m - r \neq 0$ $r^m \neq r \rightarrow D_f: \mathbb{R} - \{\log_r r\}$ د) $r^m \neq r$ $D_f = \mathbb{R} - \{\log_r r\}$ 9	1
ا) $r_{m+1} \in W$ $r_m \in W-1$ $D_f: \{m m \in \frac{W-1}{r}, k \in W\}$ <u>1, 2, 3</u>	ب) $\frac{r_{m+1} - r}{r_m - r} \in W$ $r_{m+1} - r \in r_m W - W$ <u>1, 2, 3</u> $D_f = \{m m = \frac{W-1}{r}, k \in W\}$ 10