

نام و نام خانوادگی زهرا جباری پاسخنامه تشریحی تکلیف شماره ۱ کلاس دوازدهم ریاضی A

الف) $y^3 = 2m^2 + 2m - 1 \rightarrow y^2 + 1 \leq 2n(n+1) - n \leq 0 \rightarrow (y+1)(y^2 - y + 1) \leq 0 \rightarrow y = -1$ کاملاً درست ✓
 $\rightarrow n = \frac{\pi}{2} \rightarrow \frac{\pi}{2} \cos y = 0 \times y \rightarrow y = \frac{\pi}{2}$
 $y = \frac{\pi}{2} \times$ نیمه درست ✗
 ج) $x^2 + y^2 + 2xy \leq 2xy \rightarrow x^2 + y^2 - 2xy \leq 0 \rightarrow (x-y)^2 \leq 0 \rightarrow x = y$ کاملاً درست ✓
 د) $y^3 - xy^2 + 2y \leq 2m \rightarrow (y^2 + 2)(y-1) \leq 0 \rightarrow (y^2 + 2)/(y-1) \leq 0 \rightarrow y = 1$
 $y^3 + 2y \leq xy^2 + 2m \rightarrow n = 1 \rightarrow y^3 - y^2 + 2y - 2 \leq 0$ کاملاً درست ✓

الف) $|y_1| - 2y_1 = |y_2| - 2y_2$
 $|y_1| - |y_2| = 2y_1 - 2y_2 \rightarrow 2(y_1 - y_2) = |y_1| - |y_2| \rightarrow y_1 = -y_2$ کاملاً درست ✓
 ب) $x = 0 \rightarrow [y] \leq 1 \rightarrow 1 \leq y < 2$ نیمه درست ✗

$x \geq 3$
 $1 - x \leq -2$
 $x \leq -3$
 $x = 3 \rightarrow 1 - b \leq a + 4$
 $a + b \leq 12$

$x^2 + bx - a \leq 0$
 $-x^2 - bx + a \geq 0$
 $\frac{b}{+} \frac{a}{-} \rightarrow -b^2 - b^2 + a \leq 0 \rightarrow b^2 \leq \frac{a}{2}$
 $-2a^2 + a \leq 0 \rightarrow a \leq \frac{1}{2}$
 $a + b \leq 0$

$ax^2 + bx + c > 0$
 $2a + 2b + c = 0$
 $\frac{2}{+} \frac{2}{+} \frac{c}{-} \rightarrow a = 0 \rightarrow -2b = c$
 $c + c \leq -2b$
 $-2b - 2b \leq -2b$
 $-2b \leq -2b$

$$\frac{rn+r+an+ab}{n+b} \geq 0 \rightarrow n \neq -b$$

$$b+r \neq 0 \rightarrow b \neq -r$$

$$\frac{r(r)+r}{b+r} + a \geq 0 \rightarrow \frac{1}{r+b} + a \geq 0 \rightarrow b \geq -r \rightarrow -b \leq r$$

$$b = -r$$

$$\frac{rn+r+a(n-1)}{n-1} \geq 0 \rightarrow (r+a)r + (r-a) \geq 0 \rightarrow a \geq -1 \rightarrow a = -1$$

$$\text{و) } n^2 - n \geq 0$$

$$n(n-1) \geq 0$$

$$\begin{array}{c} -1 \quad 0 \quad 1 \\ - \quad + \quad - \quad + \end{array}$$

$$D_f = [-1, 0] \cup [1, +\infty)$$

$$\Rightarrow |n| - 1 > 0$$

$$|n| > 1$$

$$n > 1$$

$$n < -1$$

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

$$\text{الف) } |n| \neq [n]$$

$$n \neq W$$

$$D_f = \mathbb{R} - W$$

$$\Rightarrow \sqrt{y} = -\sqrt{x} + 9$$

$$y = x + 1 - 1 \wedge \sqrt{x} \quad n \geq 0$$

$$D_f = [0, +\infty)$$

$$\left[n - \frac{1}{r} \right] + \left[n + \frac{r}{r} \right] \leq 0 \quad +\frac{1}{r} - \frac{1}{r}$$

$$\left[n + 1 \right] + \left[n + 1 \right] \leq 0$$

$$2 \left[n + 1 \right] \leq 0$$

$$\left[n + 1 \right] \leq 0$$

$$\left[n \right] \leq -1$$

$$-1 \leq n \leq 0$$

$$-\frac{1}{r} \leq n < 0$$

$$D = \mathbb{R} - \left[-\frac{1}{r}, 0 \right)$$

$$rn > a \rightarrow n > \frac{a}{r}$$

$$1 - \log_{10} \frac{rn-a}{1} > 0 \rightarrow 1 \geq \log_{10} \frac{rn-a}{1} \rightarrow 1 \geq rn-a$$

$$\frac{a+1}{r} \geq n > \frac{a}{r}$$

$$\frac{a+1}{r} - \frac{a}{r} \in \boxed{A}$$

$$\left(\frac{a+1}{r} - \frac{a}{r} \right) \in \boxed{A}, C \in \frac{a+1}{r}$$