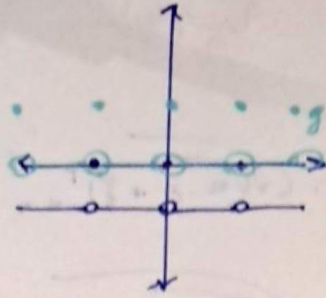


۲. آزمون ضمیمه کامل فوستر

$$g(n) =$$

$$Dg = \mathbb{R}$$



$$Df =$$

$$\textcircled{1} \tan \gamma_0 \neq 0 \quad \textcircled{2} \quad \textcircled{3} \quad n \neq 0 \quad n \neq 1$$

$$\sqrt{\tan \gamma_0} = n \Rightarrow n^2 \leq \tan \gamma_0$$

$$0 \leq n \leq \sqrt{\tan \gamma_0}$$

$$D\left(\frac{f}{g+1}\right) = Df \cap D(g+1) = \mathbb{R} - \{1\} - \{2\}$$

$$D\left(\frac{f}{g+1}\right) = \{n \mid n \in \mathbb{R}, n \neq 1, n \neq 2\}$$

$$\rightarrow n \in \{1, 2\}$$

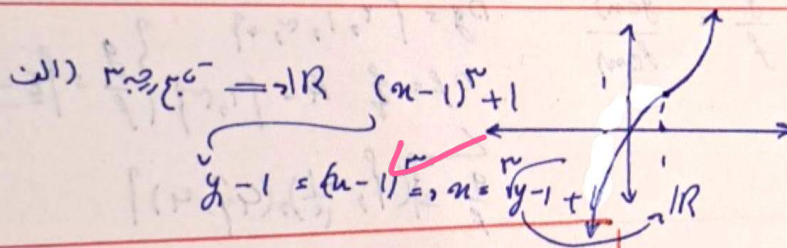
$$f(n) = \sqrt{-(n^2 - 5n + 4)} = \sqrt{-(n-4)(n-1)}$$

$$Df = [1, 4]$$

$$Dh = Df \cap Dg = [1, 4]$$

$$Dg = [1, 2, 4]$$

$$h(n) = \{(1, 0), (2, \frac{1}{2}), (4, 0)\}$$



$$b) \quad y \tan^2 \gamma - y \tan^2 \gamma = 1$$

$$n = \frac{y \pm \sqrt{y^2 + 4y}}{2y}$$

$$l = \frac{\sqrt{y^2 + 4y}}{y} \quad y^2 \cdot y \geq 0$$

$$y(y+1) \geq 0$$

$$y \neq 0 \quad y > 0$$

$$y \leq -1$$

$$Rf = (-\infty, -1] \cup (0, \infty)$$

$$a) \quad (n-2)^2 + 4 \quad [4, \infty)$$

$$b) \quad -(n-3)^2 + 12 \quad (-\infty, 12]$$

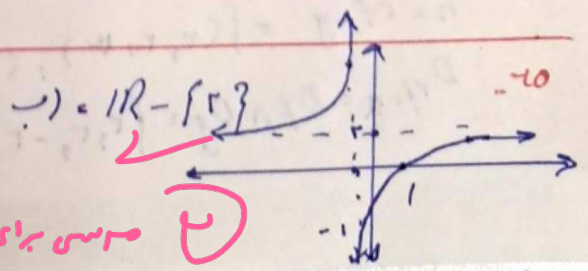
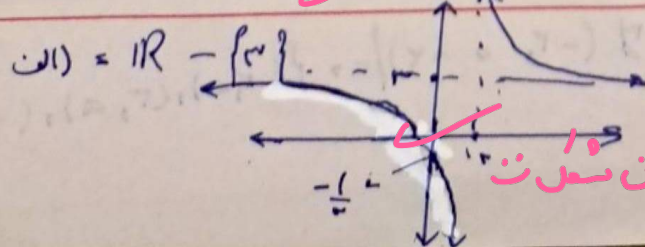
$$2) \quad \sqrt{(n-2)^2 - 5} \Rightarrow [2, \infty)$$

$$1) \quad \sqrt{n(4-n)} \quad [0, 4]$$

$$n_5 = 3 \quad y_8 = 2(4-3) = 2$$

$$a) \quad \text{لا تفرق} \quad \mathbb{R} \quad b) \quad \text{لا تفرق} \quad \mathbb{R} \quad 2) \quad \text{زیر باریکال} \quad [0, \infty)$$

$$c) \quad \text{مورد انتق} \Rightarrow [0, \infty)$$



مسابقات برای کسب نمرات

$$f(m) = \sqrt{(n-\epsilon) + \epsilon\sqrt{n-\epsilon}} + r \Rightarrow (\sqrt{n-\epsilon} + \epsilon)^r =, |\sqrt{n-\epsilon} + r|$$

$$g(m) = \sqrt{(n-\epsilon) - \epsilon\sqrt{n-\epsilon}} + r \Rightarrow \sqrt{(n-\epsilon-r)^r} =, |\sqrt{n-\epsilon} - r|$$

$$n, \epsilon \Rightarrow f(m) = \sqrt{n-\epsilon} + r$$

$$g(m) = \sqrt{n-\epsilon} - r \quad f(m) - g(m) = 2\sqrt{n-\epsilon}$$

$$\hookrightarrow \frac{r}{-r} = -1$$

$$c = -r \quad a = 0$$

$$b = r$$

$$\frac{Dg}{f} = Dg \cap Df - \{1, r\} \quad \frac{Dg}{f} = \{r, 0\}$$

$$\frac{g}{f} = \frac{g(m)}{f(m)}$$

$$Dg = \{r, 1, r, 0\}$$

$$Df = \{R - \{1, r\}\} \quad \frac{g}{f} = \left\{ \frac{1}{-r}, \frac{r}{r} \right\}$$

$$\hookrightarrow \frac{g}{f} = \left\{ \left(r, -\frac{1}{r} \right), (0, 1) \right\}$$

$$f(m) = \{(1, r), (r, -1), (r, r), (-1, 1)\} \quad g(m) = \{(-r, r), (1, -1), (r, r), (-1, 0)\}$$

$$* f(m) = \left\{ \left(\frac{1}{r}, r \right), \left(\frac{r}{r}, -1 \right), (r, r), \left(\frac{1}{r}, 1 \right) \right\}$$

$$* f(m) = \left\{ \left(\frac{1}{r}, r \right), \left(\frac{r}{r}, -1 \right) \right\}$$

$$* g(m) = \left\{ (-r, r), (1, r), (r, 1), (-1, 1) \right\}$$

$$* g(m) = \left\{ (-r, r), (r, r) \right\}$$

$$r(r) + 1 = 19 \quad r(-1)r + 1 = r$$

$$\left\{ (-1, r), (-r, -1) \right\}$$

$$* \frac{rf}{g} = \left\{ \frac{r(r)}{-1}, \frac{r(-1)}{r} \right\} = \left\{ (1, -1), \left(-\frac{1}{r}, -1 \right) \right\}$$

$$\frac{Drf}{g} = Df \cap Dg - \{1\} = \{1, r\}$$

$$h = rf + g = \{(r, r+r), (r, r+r), (-r, 0+r)\} \Rightarrow \{(r, 0), (r, 0), (-r, 0)\}$$

$$Drf + g = Df \cap Dg = \{r, r, -r\}$$