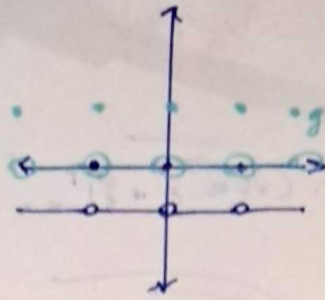


$$g(n) = \mathbb{R}$$



$$D_f = \begin{matrix} ① \tan \gamma_0 \neq \tan \gamma_1 \\ ② \sqrt{\tan \gamma_0 - \tan \gamma_1} \Rightarrow \tan \gamma_0 \neq \tan \gamma_1 \\ ③ \tan \gamma_0 \neq \tan \gamma_1 \end{matrix}$$

$$D\left(\frac{f}{g+1}\right) = D_f \cap D(g+1) = \{1, 2\} - \{1, 2\} = \{1, 2\}$$

$$D\left(\frac{f}{g+1}\right) = \{n \mid n \in \mathbb{R}, 0 \leq n \leq 1\}$$

$$\hookrightarrow n \in \{0, 1, 2\}$$

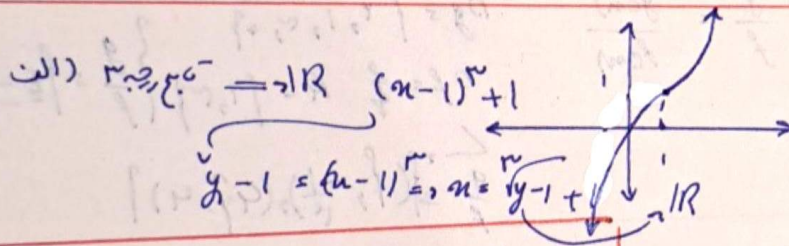
$$f(n) = \sqrt{-(n^2 - 4n + 4)} = \sqrt{-(n-2)(n-2)}$$

$$D_f = [1, 4]$$

$$D_h = D_f \cap D_g = \{1, 2, 4\}$$

$$D_g = \{1, 2, 4\}$$

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



$$f(n) = (n-2)^2 + 4$$

$$y \tan \gamma_0 - y \tan \gamma_1 = 1$$

$$n = \frac{y \tan \gamma_0 + y \tan \gamma_1}{y}$$

$$l = \frac{\sqrt{y^2 + y}}{y} \cdot y \cdot y \cdot y_0$$

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

$$y \leq -1$$

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

$$f(n) = (n-2)^2 + 4$$

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

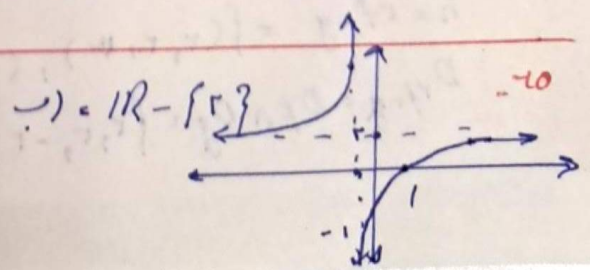
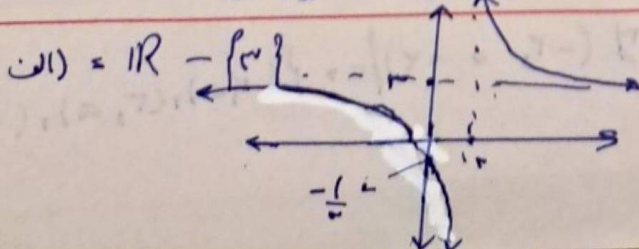
$$2) \sqrt{(n-2)^2 - 4} \Rightarrow [0, \infty)$$

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

$$n \leq 4 \quad y \leq 4 - n \leq 0$$

$$1) \text{ الف } \mathbb{R} \quad \text{ب) } \mathbb{R} \quad 2) \text{ زیر دایره } [0, \infty)$$

$$3) \text{ دایره } [0, \infty)$$



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

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

$$\text{و } m, n \Rightarrow f(m) = \sqrt{m-\epsilon} + r \quad g(m) = \sqrt{m-\epsilon} - r \quad f(m) - g(m) = 2\sqrt{m-\epsilon}$$

$$\hookrightarrow \frac{r}{-r} = -\frac{1}{r} \quad \begin{matrix} c = -r \\ d = r \end{matrix} \quad a = 0$$

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

$$\frac{g}{f} = \frac{g(m)}{f(m)} \quad Dg = \{r, 1, r, 0\} \quad Df = \{r, 1, r, 0\} \quad \left\{ \frac{g}{f} = \left\{ \frac{1}{\epsilon}, \frac{r}{\epsilon} \right\} \right.$$

$$\hookrightarrow \frac{g}{f} = \left\{ \left(r, -\frac{1}{r} \right), (0, 4) \right\}$$

$$f(m) = \{(1, r), (r, -1), (r, r), (-1, 4)\} \quad g(m) = \{(-r, r), (1, -1), (r, r), (-1, 0)\}$$

$$\star f(m) = \left\{ \left(\frac{1}{r}, r \right), \left(\frac{r}{r}, -1 \right), (r, r), \left(-\frac{1}{r}, 4 \right) \right\} \quad \star f(m^r) = \left\{ (1, r), (\sqrt{r}, -1) \right.$$

$$\star g^r(m) + 1 = \left\{ (-r, r), (1, r), (r, 4), (-1, 1) \right\} \quad \star g^r(m) = \left\{ (r, r), (-1, -1) \right\}$$

$$r(r^r) + 1 = 19 \quad r(-1)^r + 1 = r \quad r(0, r) + 1 = r \quad (-1, r), (-\sqrt{r}, -1), (-r, r) \}$$

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

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

$$h = rf + g = \{(r, r+r), (r, r+r), (-r, 0+4)\} \Rightarrow \{(r, 0), (r, 0), (-r, 4)\}$$

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