

$$f(m) = 3m + |m| \rightarrow m > 0 \rightarrow \varepsilon m$$

$$\rightarrow m < 0 \rightarrow 2m$$

طبق فرمول کلی کسر کلاسی گفته شده عمل می کنیم:

$$\frac{\frac{m}{\varepsilon} + \frac{m}{2}}{2} = \frac{3m}{4\varepsilon}$$

$$g(m) = a m + b |m|$$

$$\frac{3}{4\varepsilon}$$

$$\frac{1}{2}$$

$$a b, \frac{3}{4\varepsilon}$$

$$\frac{3m}{\varepsilon} - \frac{m}{\varepsilon}$$

درون قدر مطلق: افتادن تقسیم بر 2:

$$\frac{m}{\varepsilon} \cdot \frac{a}{2}$$

6

$$(y_1 - 1) \rightarrow \frac{y_1 + \varepsilon}{2 + m} = \frac{-1}{2} \rightarrow -2 - m = 1 \rightarrow -3 = m$$

بسط کردن m:

$$\frac{3m + \varepsilon}{n - 2} = f(m) \quad f^{-1}(m) = \frac{3m + \varepsilon}{n - 2}$$

$$f \circ f^{-1}(m) + f^{-1}(m) = m + \frac{3m + \varepsilon}{n - 2}$$

7

$$x^2 - 3m, x^2 + \varepsilon \rightarrow \boxed{n = \frac{-\varepsilon}{3}} \leftarrow n = \frac{x^2 + \varepsilon}{n - 2} = \frac{3m + \varepsilon + x^2 - 3m}{n - 2}$$

$$\varepsilon g^{-1}(\varepsilon) + f^{-1}(-2)$$

$$-2 \leftarrow f\left(\frac{-2m + \varepsilon}{a}\right) = 2 - g\left(\frac{m}{2}\right) \rightarrow g\left(\frac{m}{2}\right) = \varepsilon$$

$$f(a) = -2 \rightarrow f^{-1}(-2) = a$$

$$g(b) = \varepsilon \rightarrow g^{-1}(\varepsilon) = b$$

$$\varepsilon b + a \rightarrow \varepsilon\left(\frac{m}{2}\right) - 2m + 2 = 2m - m + \varepsilon = m + \varepsilon$$

$$\boxed{3}$$

8

$$y = \frac{am - 13}{1 - a} \xrightarrow{\text{نیمه یی}} \frac{a(-m) - 13}{1 - (-m)} \xrightarrow{\text{نیمه یی}} - \left(\frac{-am - 13}{1 + m} \right) \rightarrow \frac{am + 13}{1 + m}$$

$$\text{نیمه یی دوم: } \frac{a(m - 2) + 13}{1 + (m - 2)} \xrightarrow{\text{نیمه یی}} \frac{am + 13 - 2a}{m - 1} - 3 = f \Rightarrow \frac{am + 13 - 3am + 6}{m - 1} = f$$

$$\text{عمل بر معادله } = \frac{2m + 4}{m - 1} - \frac{m + 2}{m - 2} \rightarrow m^2 - 3m - 4 = 0$$

$$\boxed{3} = S = \text{معادله یی برقرار}$$

$$\frac{3m + 4}{m - 1} = f$$

$$- \frac{m + 2}{m - 2} = f^{-1}$$

9

$$f^{-1}(x) = g(m)$$

$$x = y + \varepsilon [y] \leftarrow y = x + \varepsilon [x] \quad \text{برای از طرفین:}$$

$$[x] = [y] + \varepsilon [y] \rightarrow [x] = \varepsilon [y] \rightarrow [y] = \frac{[x]}{\varepsilon} \rightarrow x - \frac{\varepsilon}{\varepsilon} [x] = y$$

$$(f - g)(x) = x^2 [x] - x + \frac{\varepsilon}{\varepsilon} [x] = \frac{2\varepsilon}{\varepsilon} [x]$$

$$D_f^{-1} = R_f = D_g$$

$$D_f \cap D_g = \{x \in \mathbb{R} \mid [5x, 5x+1)\} \quad \{x \in \mathbb{R} \mid [5x, 5x+1)\}$$

10