

$$\frac{L}{W} = \frac{\Delta}{\varepsilon} \rightarrow L = \frac{\Delta}{\varepsilon} W \rightarrow \frac{L_T}{W} = T = \frac{1+\sqrt{\Delta}}{2} \rightarrow L_T = TW$$

$$A = L \times W = \frac{\Delta}{\varepsilon} W \times W = \frac{\Delta}{\varepsilon} W^2 \rightarrow L_T = L_T \times W = TW^2$$

$$\frac{A_T}{A_0} = \frac{\varepsilon}{\Delta} T = \frac{2(1+\sqrt{\Delta})}{\Delta}$$

$$d = \sqrt{L^2 + W^2} \rightarrow \frac{d}{L} = T \rightarrow \frac{\sqrt{L^2 + W^2}}{L} = T \rightarrow \sqrt{1 + \left(\frac{W}{L}\right)^2} = T$$

$$1 + \left(\frac{W}{L}\right)^2 = T^2 \rightarrow \left(\frac{W}{L}\right)^2 = T^2 - 1 \rightarrow \frac{W}{L} = \sqrt{T^2 - 1} \rightarrow T = \frac{1}{\sqrt{T^2 - 1}}$$

$$\rightarrow \left(\frac{W}{L}\right)^2 = T^2 - 1 \rightarrow \left(\frac{L}{W}\right)^2 = \frac{1}{T^2 - 1} \rightarrow 0.1211$$

$$\sqrt{2a^2 + 8a} = 2 - 4a \rightarrow 2 - 4a \geq 0 \rightarrow a \leq \frac{1}{2} \rightarrow 2a^2 + 8a = (2 - 4a)^2 \rightarrow 2a^2 + 8a = 4 - 16a + 16a^2$$

$$0 = 14a^2 + 8 - 16a \rightarrow a = \frac{16 \pm 12}{14} \rightarrow a = 2 \rightarrow 2 \neq \frac{1}{2} \rightarrow \text{قق}$$

$$a = \frac{1}{2} \rightarrow \text{قق}$$

$$\frac{x+1}{x} = \frac{9}{2}$$

$$t = \sqrt{t^2 - 1} \rightarrow t > 0, t \neq 1 \rightarrow \frac{t}{t^2 + 2} = \frac{t}{t^2 - 2} \rightarrow \frac{t}{t^2 + 2} \left(\frac{1}{t^2 + 2} - \frac{1}{t^2 - 2} \right) =$$

$$\frac{t}{t^2 + 2} \cdot \frac{-4t}{(t^2 + 2)(t^2 - 2)} = \frac{t}{t^2 + 2} = \frac{t}{t^2 - 2} \rightarrow \frac{t}{t^2 + 2} = \frac{t}{t^2 - 2} \rightarrow \frac{t}{t^2 + 2} = \frac{t}{t^2 - 2}$$

$$t = \sqrt{11 + 4\sqrt{3}}$$

$$(y = t^2) \rightarrow 8(y + 2) = (y - 9)^2 \rightarrow y = 11 \pm 4\sqrt{3}$$

$$x = y + 1 = 12 + 4\sqrt{3}$$

$$t = \sqrt{t^2 - 1} \rightarrow \frac{1}{\sqrt{t^2 + 2}} - \frac{1}{t - 2} = \frac{t}{2} \rightarrow f(t) = \frac{1}{\sqrt{t^2 + 2}} - \frac{1}{t - 2} - \frac{t}{2} = 0$$

$$f(0) = 0.12 \oplus$$

$$f(1/4) = -1/4 \ominus$$

$$\frac{1}{\sqrt{1-x} + 1} - \frac{1}{1 - \sqrt{1-x}} = \frac{-2\sqrt{1-x}}{1-x} \rightarrow \frac{-2\sqrt{1-x}}{1-x} = \frac{1-x}{2\sqrt{1-x}}$$

$$x^2 + 10x - 24 = 0 \rightarrow x = 2 \rightarrow \text{مخرج افسردانه}$$

$$x = -12 \rightarrow \text{ریشه تقابل}$$

