

$$\begin{aligned} a+b &= ra \\ a &= b \end{aligned}$$

$$\begin{aligned} a-rb+1 &= ra \\ -a+1 &= ra \rightarrow a = \frac{1}{r} \end{aligned}$$

(نِدْبَة)

$$x \Rightarrow 0 \rightarrow 0 = c+1 \rightarrow \underline{c = -1}$$

$$x \Rightarrow 1 \rightarrow 1 = \frac{f-a}{b+r} \rightarrow b+r = f-a$$

$$x \Rightarrow r \rightarrow r = \frac{1-ra}{rb+r} \rightarrow rb+r = 1-ra \rightarrow rb+r = f-a$$

$$\left. \begin{array}{l} \\ \\ \end{array} \right\} \underline{b=0}, \underline{a=1}$$

$$-1 + 0 + 1 = \frac{0}{0}$$

امین خانوونی دهم الف

سؤال یک

$$\left. \begin{aligned} 9 &= 3x - y \xrightarrow{\times 2} 18 = 6x - 2y \\ -4 &= x + 2y \rightarrow -4 = x + 2y \end{aligned} \right\} \rightarrow 14 = 7x \Rightarrow x = 2 / y = -3 \Rightarrow \frac{x}{y} = \frac{-2}{3} \leftarrow \text{الف}$$

$$\left. \begin{aligned} -1 &= \frac{1}{2} - \frac{1}{y} \rightarrow -\frac{2}{y} = \frac{1}{2} - \frac{3}{2} \\ -3 &= \frac{3}{2} - \frac{1}{y} \rightarrow -\frac{3}{2} = \frac{3}{2} - \frac{1}{y} \end{aligned} \right\} \rightarrow \frac{3}{2} - \frac{3}{2} = \frac{3}{2} - \frac{1}{y} = -\frac{1}{y} = -\frac{3}{2} \Rightarrow \frac{1}{y} = \frac{3}{2} \leftarrow \text{ب}$$

سؤال دو

$$a - 1 = -2 \rightarrow a = -3$$

$$f(-3) + 2f(2) = 3f(1) \rightarrow -4 + 2b = -4 \rightarrow b = 0$$

$$m^2 - 3m = -2 \rightarrow m^2 - 3m + 2 = 0 \rightarrow (m-1)(m-2) = 0$$

$m = 1 \rightarrow$  عقوق  $(2, 4) (2, 6) \rightarrow$  تابع  $x$  (سؤال سه)  
 $m = 2 \rightarrow$  عقوق  $(3, 4) (3, 6) \rightarrow$  تابع  $x$

سؤال چهارم الف)  $\times$  ب)  $\checkmark$  ج)  $\times$  د)  $\checkmark$

$$y_1 = -\sqrt{x+1}$$

الف  $\rightarrow y_2 = \sqrt{x+1} \rightarrow y_1 = y_2$  تابع هست!

سؤال پنج

$$\rightarrow \text{if } x=1 \rightarrow \sqrt{1-y^2} = y \rightarrow y^2 = 1-y^2 \rightarrow 2y^2 = 1 \rightarrow y = \pm \frac{\sqrt{2}}{2}$$

تابع نباشد!

سؤال شش

$$\text{الف} \rightarrow y = |x| \Rightarrow |y| = x \Rightarrow$$

تابع نباشد!

$$\text{ب} \rightarrow y^3 + 3y^2 + 3y = -x^3 - x \Rightarrow$$

تابع نباشد!  $x^3 + 3x^2 + 3x + 1 = (x+1)^3$  بازنه معادله شکل سه سه جواب خواهد داشت

سؤال هفت

$$\frac{(x+2)^2 + 1}{(x+2)^2 + 3} = \frac{(\sqrt{3}-2+2)^2 + 1}{(\sqrt{3}+2-2)^2 + 3} = \frac{3+1}{3+3} = \frac{4}{6} \Rightarrow \frac{2}{3}$$

سؤال هشت

$$-f = -1 - a + b \Rightarrow -3 = b - a \rightarrow b = -2$$

$$y = 3x - a \quad y = x^3 + ax + b$$

$$-4 = -3 - a \rightarrow a = -1$$

$$y = 3x - 1 \quad y = x^3 + x - 2$$

$$3x - 1 = x^3 + x - 2 \rightarrow x^3 - 2x - 1 = 0$$

مبادت بر  $(x+1)$  بخش  
 پذیر است زیرا یکی از  
 نقاط مشترک  $(-1)$   
 است

$$\rightarrow (x+1)(x^2 - x - 1) = 0$$

$$\Delta > 0 \rightarrow S = \frac{-b}{a} = \frac{1}{3}$$