

الفاد اخوان  
 قسم A  
 قسم

$$x^2 + px = x^2 - f \rightarrow x^2 - px + px = -f \rightarrow +px = -f \rightarrow \boxed{p = -\frac{f}{x}}$$

$$g(x) \Rightarrow px + b = x \rightarrow f + b = x \rightarrow b = -1 \rightarrow \frac{f + a}{+a} = x \rightarrow f + a = 1 \rightarrow a = 1 - f$$

$$\frac{(1^2) + 1}{1 + 1} = \frac{1}{2} = f = f(1)$$

$$(x+1)(x-f) \rightarrow x^2 - fx - f \rightarrow px^2 - (f-p)x + b \rightarrow \frac{f(1)+1}{1(1)+(-f)(1)-1} = \frac{a}{12}$$

$$f(-1)^2 + a(-1) + b = 0 \rightarrow f - a + b = 0 \rightarrow b - a = -f$$

$$x^2 - f(-f)(b) = 0 \rightarrow x^2 + f^2b = 0 \quad \Delta = 0 \text{ ریشه تکراری داریم پس}$$

$$b - a = -f \rightarrow b = a - f$$

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

$$-1 - f = b \rightarrow b = -1 - f \rightarrow \boxed{f - 1 = -12}$$

$$11^2 + m + 1 \neq 0 \rightarrow m + 12 \neq 0 \rightarrow m \neq -12 \rightarrow x^2 + mx + 1 \text{ ریشه نامبر باشد}$$

$$m^2 - f(1)(1) < 0, m^2 - f < 0, -2 < m < 12 \rightarrow \text{II, II} \rightarrow -2 < m < 12$$

$$f(x) = \sqrt{\frac{f-1}{x^2}} \xrightarrow{x \neq 0} f(x) = \frac{f-1}{x^2} \geq 0 \rightarrow \frac{f-1}{x^2} \geq 0 \rightarrow \frac{f-1}{(x+\frac{1}{x})(x-\frac{1}{x})} \geq 0$$

$$\frac{f-1}{x^2} \geq 0 \rightarrow \frac{f-1}{(x+\frac{1}{x})(x-\frac{1}{x})} \geq 0 \rightarrow \frac{f-1}{x^2 - \frac{1}{x^2}} \geq 0 \rightarrow \frac{f-1}{x^2} \geq 0 \rightarrow \frac{f-1}{x^2} \geq 0 \rightarrow \frac{f-1}{x^2} \geq 0$$

باید نامعنی شود  $\rightarrow$  نمودار سهمی رو با آلا باشد و محور ها را قطع نکند یا فقط در یک نقطه لمس کند

$$m > 0 \rightarrow \Delta \leq 0 \rightarrow (pm)^2 - f(m)(1) = f m^2 - f m \rightarrow f m(m-1) \leq 0$$

$$0 \leq m < 1 \text{ و II و I} \rightarrow m > 0 \rightarrow 0 \leq m < 1 \rightarrow \text{با المکرتا محظی} \rightarrow f(m) = 1 \rightarrow \boxed{0 \leq m < 1}$$

$$f \times \frac{1}{p} + k = p + k = 2 \rightarrow k = 0 \rightarrow \frac{1}{p} = a \rightarrow \text{مخرج صفر و تعریف نشده می شود}$$

$$k + a = \frac{1}{p}$$

$$\frac{ax^2 - f}{px - 2} = \frac{(px + 2)(px - 2)}{px + 2} = px - 2 \rightarrow px - 2 - px + b \rightarrow b = 2$$

$$f(-\frac{p}{p}) = pa(-\frac{p}{p}) + 2 = -pa + 2 \quad g(-\frac{p}{p}) = p(-\frac{p}{p}) + b = -p + b$$

$$g(-\frac{p}{p}) = -2 - 2 = -f \quad -pa + 2 = -f \quad -pa = -f \rightarrow a = \frac{f}{p}$$

$$p(-\frac{p}{p}) = 0$$

$$\frac{x^2 - F}{x - r} = \frac{(x - r)(x + r)}{x - r} = x + r$$

$$g(r) = r + r = F \quad f(r) = r a^r + a(r) = r a^r + r a$$

$$r a^r + r a = F \quad r a^r + r a - F = 0 \rightarrow a^r + a - r = 0$$

$$(a + r)(a - r) = 0 \rightarrow \begin{cases} a = -r \\ a = +r \end{cases}$$