

$am^2 - am + a$ $B = 2a, a$ $\frac{c}{a} = 2a^2$ $\frac{f}{r} = 2a^2$ $a^2 = \frac{f}{a}$	$\frac{b}{a} = \frac{a}{r}$ $\alpha = \frac{r}{r} \quad B = 2 \rightarrow \frac{a}{r} = \frac{1}{r} \rightarrow a = 1$ $\alpha = \frac{-r}{r} \quad B = -2 \rightarrow \frac{a}{r} = \frac{-1}{r} \rightarrow a = -1$	$ 1 - (-1) = 2$ ✓	۱
$\frac{1}{\sqrt{a}} + \frac{1}{\sqrt{b}} = d$ $\frac{\sqrt{a} + \sqrt{b}}{\sqrt{ab}} = d$ $\frac{a+b + 2\sqrt{ab}}{ab} = 2d$	$\frac{m+1f}{r^2} + 2\sqrt{\frac{1}{r^4}} = 2d$ $\frac{m+1f}{r^2} + 2(\frac{1}{r^2}) = 2d$	$m+2f = 2a$ $m = -1$ $-m^2 + 2m + 2 = 0$ $p = \frac{r}{-1} = -2$ ✓	۲
$S = 1 \quad a+b = 1$ $B = 1-a$ $a(1-a) = -2 \rightarrow a^2 - a - 2 = 0$ $(a-2)(a+1) = 0$ $a = 2, B = -1$ $a = -1, B = 2$	$f(1)^2 + k(-1)^2 - 9(-1) - 2 = 0$ $-9 + k + 9 - 2 = 0$ $k = -2$ ✓		۳
$x^2 + 4x + a = 0$ $\frac{b}{a} = -4$ ✓ $p = a$	$2x^2 + 2B^2 = 12\sqrt{2} + 18$ $2x^2 + 2(-x-4)^2 = 12\sqrt{2} + 18$ $4x^2 + 2x^2 + 16x + 32 = 12\sqrt{2} + 18$ $6x^2 + 16x + 14 = 12\sqrt{2}$	$-24 \pm \sqrt{24^2 - 4(6)(14 - 12\sqrt{2})}$ $= \frac{-24 \pm \sqrt{144 + 240\sqrt{2} - 336}}{12}$	۴
$x^2 - 4mx + a = 0$ $t^2 - 4t - 5 = 0$ $49 + 20 = 69$ $t = \frac{4 \pm \sqrt{16 + 20}}{2}$ $x = \frac{4 \pm \sqrt{36}}{2}$	$2p^2 - 3sp + 15 = 0 \rightarrow 2p^2 - 3(-\frac{V \pm \sqrt{49}}{2}) + 15 = 0$ $2p^2 + \frac{3V \pm 3\sqrt{49}}{2} + 15 = 0$ $4p^2 + 3V \pm 3\sqrt{49} + 30 = 0$	$p = \frac{-(3V \pm 3\sqrt{49}) \pm \sqrt{(3V \pm 3\sqrt{49})^2 - 4(4)(30)}}{2(4)}$	۵

سوال ۵ در دو خانواد نه ۱۸

$$S = -4 \quad \rho = a$$

rf

$$\alpha, \beta = \frac{-4 \pm \sqrt{16 - 4a}}{2} \quad \alpha < \beta \rightarrow \alpha = -2 - \sqrt{4 - a}$$

$$\alpha^r + r(\alpha^r + \beta^r) = \alpha^r + r(S^r - r\rho)$$

$$(-2 - \sqrt{4 - a})^r + r(16 - 4a) = 12\sqrt{r} + 12 \rightarrow a = 1$$