

$$g_{max} = \frac{-\Delta}{f_a} = \frac{-(b^2 - f_a c)}{f_a} = \frac{-(b^2 + 12)}{-f} = \frac{b^2 + 12}{f} \quad b \text{ در } max \quad \Delta = -x^2 + b x^2 - 1$$

$$\Rightarrow b^2 + 12 = 12 \Rightarrow b^2 = 0 \Rightarrow b = \pm f$$

لیکن

الف) $f(t) = at^2 + 2at + 12 \Rightarrow t^2 + 2t + 12 \Rightarrow \Delta = b^2 - 4ac = 4 - 48 = -44 < 0$ پس جوابی ندارد

$$\rightarrow f(t) = (t - a)^2 - 10$$

$$f \cdot a^2 = t^2 + 2t - 10 \Rightarrow (t - 0)(t + 12) \Rightarrow t = -12 \Rightarrow f \cdot a^2 = -12 \Rightarrow a^2 = \sqrt{12} \Rightarrow a = \pm \sqrt{12}$$

$$t = 0 \Rightarrow f - a^2 = 0 \Rightarrow a^2 = f \Rightarrow a = \pm \sqrt{f}$$

$$fa^2 - 16a + 12$$

الف) α ب) $\alpha + 2$

$$\Rightarrow \frac{\sqrt{\Delta}}{2a} = 2 \Rightarrow \frac{\sqrt{16 - 16m}}{2} = 2 \Rightarrow \sqrt{16 - 16m} = 4 \Rightarrow 16 - 16m = 16 \Rightarrow m = 0$$

$$fa^2 - 16m + 12 \Rightarrow 64 - 16m + 12 = 0 \Rightarrow 76 - 16m = 0 \Rightarrow m = \frac{76}{16} = 4.75$$

$$a^2 - fm + 12 = (a - 2)(a - 1) \Rightarrow a = 1 \text{ or } a = 2$$

$$A \cdot B = f \quad 2a^2 - 4a + m - 1 = 0$$

$$2a^2 - 4a + m - 1 = 0 \Rightarrow a = 1 \quad \alpha \times B = 0 \Rightarrow \frac{c}{a} = 0 \Rightarrow m = 1$$

$$S = \frac{-b}{a} = 1 \Rightarrow \frac{12}{2} + 2 + B = 10 \Rightarrow B = 0$$

$$-ma^2 + fa + m^2 - 2 = 0$$

$$\Rightarrow \frac{c}{a} = 1 \Rightarrow \frac{m^2 - 2}{-m} = 1$$

$$\Delta \Rightarrow 16 + 4m^2 - 16m$$

$$m = 1 \Rightarrow 16 + 4 - 16 = 4 > 0 \Rightarrow \Delta > 0$$

$$m^2 - 2 - m = 0 \Rightarrow m^2 - m - 2 = 0 \Rightarrow (m + 2)(m - 1) = 0 \Rightarrow m = -2 \text{ or } m = 1$$

$$a^2 - ma + 12 = 0$$

$$\alpha B = f$$

$$\alpha B = \frac{c}{a} = f$$

$$B = \frac{f}{a} \Rightarrow B = \frac{f}{12}$$

$$\alpha B = f \Rightarrow \alpha = \frac{f}{B} = \frac{f}{\frac{f}{12}} = 12$$

$$A + B = \frac{f}{2} + \frac{a}{f} = \frac{16 + 12}{12} = \frac{28}{12} = \frac{7}{3} = \frac{m}{1} \Rightarrow m = \frac{7}{3}$$

$$a^2 - 2a + m = 0$$

سوال ۱۰

-۷

مثال α
 $\alpha^2 + \alpha = \frac{1}{\alpha}$ (۴)

$\alpha = 1 \Rightarrow 1 = \alpha$

مثال ۱
 $\alpha^2 + \alpha = \frac{1}{\alpha} \Rightarrow \alpha^3 + \alpha^2 = 1 \Rightarrow m = 1$

$a^2 - 2a + 2 = 0$ $\alpha^2 + \frac{1}{\alpha^2} = 0$ $S = V$
 $P = 2$

$\alpha \times B = 2$ $(\alpha)^2 + (\frac{2}{\alpha})^2$
 $\Rightarrow B = \frac{2}{\alpha} \Rightarrow \alpha^2 + B^2 = \alpha^2 + (\frac{2}{\alpha})^2 \Rightarrow \alpha^2 + B^2 = S - 2SP = V(Fa - F) = 201$

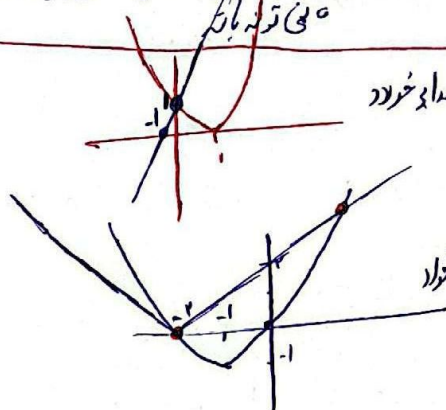
-۸

$h(t) = -16t^2 + 64t$

$h(\max) = \frac{-A}{4a} = \frac{64}{-32} = 2$ (۹۲۷)

زمان $t \Rightarrow$ زمان
 $-16(t - 2)^2 \Rightarrow t = 2$
 $t = 0 \Rightarrow$ نقطه
 چون نقطه از دو خط موازی به دایره باید باشد

$(n-1)^2 = 2n+1$



تساوی خروجی

$a^2 + 2m = |a+2|$

$a^2 + 2a = a+2$

$a^2 + a - 2 = 0$

$(a+2)(a-1) \Rightarrow a = 1$
 $a = -2$

خروجی $a = 1$

خروجی $a = 2$

$a^2 + 1 - 2a = 2a + 1$

$a^2 - 4a = 0$

$(a(a-4)) \Rightarrow a = 0$
 $a = 4$

-۱۰