

$$\frac{-b^2 - 12}{-4} = 7 \quad b^2 + 12 = 28$$

$$b^2 = 16$$

$$b = \pm 4$$

الف) $x^2 + 2x + c = 0$

$\Delta < 0 \Rightarrow$ ریشه ندارد

ب) $x^2 - 2x - 12 = 0$

$(x-5)(x+2) = 0$

$x = 5 \quad x = -2$

$4 - x^2 = 0 \quad x^2 = 4 \quad x = \pm 2$

$4 - x^2 = -c \quad x^2 = 7 \quad x = \pm \sqrt{7}$

$\alpha + \alpha + 2 = 4$

$\alpha = 1$

$\alpha + 2 = 3$

$\frac{m}{4} = 1 \times c$

$m = 12$

$\frac{c}{4} (\alpha + \beta) + \frac{1}{4} (\alpha - \beta) = 4$

$\frac{c}{4} \times 2 + \frac{1}{4} (\alpha - \beta) = 4$

$\alpha - \beta = 2$

$\frac{\sqrt{c^2 - 12(m-1)}}{3} = 2$

$c^2 - 12m + 12 = 36$

$m = 1$

$\frac{m^2 - 2}{-m} = 1$

$m^2 + m - 2 = 0$

$m = 1 \quad m = -2$

$\begin{cases} m = 1 & -x^2 + 4x - 1 = 0 \quad \Delta > 0 \\ m = -2 & 2x^2 + 4x + 2 = 0 \quad \Delta = 0 \end{cases}$

$\alpha \beta = c$

$3\beta = 4$

$\beta = \frac{4}{3}$

$\alpha = \frac{9}{4}$

$\alpha + \beta = \frac{4}{3} + \frac{9}{4} = \frac{16 + 27}{12} = \frac{43}{12}$

$m = \frac{4c}{12}$

$\alpha + c\alpha = 4$

$\alpha = 1$

$m = 3 \times 1 = 3$

$\alpha \beta = 2$

$\beta = \frac{2}{\alpha}$

$\beta^2 = \frac{4}{\alpha^2}$

$\alpha^2 + \frac{4}{\alpha^2} = \alpha^2 + \beta^2 = (\alpha + \beta)^2 - 2(\alpha\beta) = 4 - 2(2) = 0$

ساخته شده ارتفاع $\frac{50 \times 50}{4 \times 1} = 625$

$-10x^2 + 50x = 0$

$-10x(x - 5) = 0$

$x = 0 \quad x = 5$

الف



ب

