

دفعه دقت ران

آنها شکر می

$$x^2 - \omega x + 2 = 0$$

$$\frac{2a + \beta^{\omega}}{\omega \beta^2} = ?$$

19, 7

(1)

$$a + \beta = \frac{-b}{a} = \omega$$

$$a\beta = \frac{c}{a} = 2$$

$$\rightarrow a = \frac{2}{\beta}$$

$$\begin{cases} \beta^2 - \omega\beta + 2 = 0 \\ \beta^2 = \omega\beta - 2 \end{cases}$$

$$\beta^2 = \beta(\omega\beta - 2) = \omega\beta^2 - 2\beta =$$

$$\omega(\omega\beta - 2) - 2\beta = \omega^2\beta - 10$$

$$\beta^{\omega} = \beta^2 \beta^{\omega} = (\omega\beta - 2)(\omega^2\beta - 10) = 11\omega\beta^2 - 92\beta + 20$$

$$11\omega(\omega\beta - 2) - 92\beta + 20 = 47\omega\beta - 210$$

$$\frac{2a + \beta^{\omega}}{\omega \beta^2} = \frac{2(\frac{2}{\beta}) + (47\omega\beta - 210)}{\omega \beta^2} = \frac{\frac{4}{\beta} + 47\omega\beta - 210}{\omega \beta^2} = \frac{4}{\omega \beta^3} + \frac{47\omega}{\omega \beta} - \frac{210}{\omega \beta^2} = \frac{4}{\omega \beta^3} + \frac{47}{\omega \beta} - \frac{210}{\omega \beta^2}$$

$$\rightarrow \frac{19 \times \omega\beta(2\beta - 10)(\omega\beta - 2)}{\omega\beta(2\beta - 10)(\omega\beta - 2)} = 19$$

✓

مخرج مشترک
سی کیدیم

$$(2, -4), (-1, \omega, -2)$$

(2)

چون و ما برابر اند

مساوی و مساوی
مساوی

$$x = \frac{2 + (-1/\omega)}{2} = \frac{1/\omega}{2}$$

$$\frac{1/\omega}{2} \times 2$$

✓

چون مساوی
تساوی
مساوی
مساوی

$$\frac{a + \beta}{2} = \frac{1/\omega}{2}$$

$$\rightarrow a + \beta = 1/\omega = \frac{2}{\omega}$$

18

$$x^2 + 2kx + \omega = 0$$

$$a - \beta = \frac{k}{\mu} k$$

$$\left[\frac{k^2}{2} \right] = ?$$

(2)

$$\frac{\sqrt{\Delta}}{1a_1} = \frac{k}{\mu} k = \sqrt{4k^2 - 20}$$

$$\frac{19}{9} k^2 = 4k^2 - 20$$

$$k_0 = \frac{29k^2}{9} - \frac{14k^2}{9} = \frac{k_0}{9} k^2$$

$$\frac{9}{k_0} \times k_0 = k^2$$

$$\left[\frac{k^2}{2} \right] = \left[\frac{9}{2} \right] = \left[\frac{k_0}{2} \right] = 4$$

✓

2, 1

2, 1

$$\frac{1}{2} + \frac{2}{2}$$

$$A(3, y), B(-5, y)$$

معین، اس مساوی برابر یک است

(K)

$$a^2 + b^2 = \Delta = (a+b)^2 - 2ab$$

$$\frac{-\Delta}{4a} = 1 = \frac{-b^2 + 4ac}{4a} = 1$$

$$\rightarrow ab = -\frac{1}{4}$$

(2) ✓

معین، تقاطع
و مساوی است

$$\frac{3 + (-5)}{2} = -1$$

$$\frac{a+b}{2} = -1 \quad a+b = -2$$

$$y = a(x^2 + 3x - \frac{1}{4}) \quad 1 = a(1 - 2 - \frac{1}{4}) \rightarrow a = -\frac{4}{3} \rightarrow y = -\frac{4}{3}(x^2 + 3x - \frac{1}{4})$$

$$\rightarrow y = -\frac{4}{3}$$

$$-x^2 + \Delta x + m = 0 \rightarrow x^2 - \Delta x - m = 0$$

$$\frac{\beta}{-1} + \frac{\alpha}{1} = 0 \quad (5)$$

$$\Delta \geq 0 \rightarrow 2\Delta + 4m \geq 0$$

$$m \geq -\frac{1}{2}\Delta$$

$$-\frac{11}{4} + \frac{4\Delta}{4} + m < 0$$

$$\rightarrow 2\Delta + m < 0 \rightarrow m < -2\Delta$$

$$\frac{-b}{4a} < m \rightarrow \frac{-b}{4a} = \frac{1}{4}\Delta$$

$$-\frac{1}{2}\Delta < m < -2\Delta$$

$$\rightarrow [-\frac{1}{2}\Delta, -2\Delta]$$

12

کسر

(2) ✓

$$y = mx^2 - 12x + \Delta m - 1$$

$$m(\frac{4}{m})^2 - 12(\frac{4}{m}) + \Delta m - 1 = 0 \quad (4)$$

$$x = \frac{-b}{4a} = \frac{-(-12)}{4m} = \frac{12}{4m} = \frac{3}{m}$$

$$\frac{34}{m} - \frac{48}{m} + \Delta m - 1 = \frac{-14}{m} + \Delta m - 1 = 0$$

$$\Delta m - \frac{14}{m} = 1 \rightarrow \Delta m^2 - 14m - 1 = 0 \quad m = 14$$

$$m = -14$$

$$x = \frac{3}{m} \quad m = 14 \rightarrow x = \frac{3}{14}$$

(2) ✓

$$x^2 + 2(a+1)x + 2a - 1 = 0$$

$$a+b = -2a-2 \quad ab = 2a-1$$

$$a^2 = a \cdot b = 2a-1$$

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

(1)

شرط وجود دو ریشه برای $a=1$ بررسی کن

$$a=1 \rightarrow$$

$$x^2 + 4x + 1 = 0 \rightarrow \Delta > 0$$

✓

24

27

①

$$x^2 - vx - \omega = 0 \quad \downarrow n=x$$

$$x^2 - 35x + 25 = ?$$

$$n^2 - vn - \omega = 0$$

$$\Delta = 49 - 4(-\omega) = 49$$

$$x = \frac{35 \pm \sqrt{49 + 4\omega}}{2} = \frac{11 \pm \sqrt{49}}{2} = \frac{5 \pm \sqrt{49}}{2}$$

$$n = \frac{v \pm \sqrt{49}}{2} \rightarrow \text{GGE}$$

$$x = \frac{v \pm \sqrt{49}}{2} \quad x = \sqrt{\frac{v \pm \sqrt{49}}{2}}$$

$$S = \text{ine} \quad , \quad p = \frac{v \pm \sqrt{49}}{2}$$

② ✓

$$y = 1 \times x^2 - 1x - 4$$

$$y = -x^2 - 1$$

⑨

$$\frac{-b}{2a} = \frac{r}{2k} = \frac{r}{k}$$

$$\frac{-\Delta}{2a} = \frac{-b^2 + 4ac}{2k} = \frac{-19 + (-24k)}{2k} = \frac{-r}{k} = \frac{-9}{k} = \frac{-r-9k}{k}$$

$$\frac{-r}{k} - 9 = -r \left(\frac{r}{k} \right) - r \rightarrow k - r = \frac{-r}{k} + \frac{1}{k} = -r + 9 = r = \frac{r}{k}$$

$$rk = r \rightarrow k = 1$$

$$y = \frac{-r}{k} - 9 = \frac{-r}{1} - 9 = -r - 9 = -1$$

② ✓

$$-(1 + 1) = 0$$

$$y = -mx^2 + mx + 1$$

$$y = -m - x$$

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

$$(m+1)^2 + 4m(m+1) < 0 \rightarrow (m+1)(5m+1) < 0$$

	-1	$-\frac{1}{5}$
+	0	-
-	0	+

من -1 و $-\frac{1}{5}$ مع مقلوبه

② ✓

$$-1 < m < -\frac{1}{5}$$

مع مقلوبه