

۱۳ درجه اولی A جزو دایره می باشد

$$x = r \text{ فرض کنیم} \rightarrow x_5 = \frac{-b}{ra} = r \rightarrow \frac{-1}{ra-r} = r \rightarrow -1 = \epsilon a - \epsilon \rightarrow \epsilon a = r \rightarrow a = \frac{r}{\epsilon}$$

$$\rightarrow y = -\frac{1}{\epsilon} x^r + x + r \quad \Delta = b^r \epsilon a \epsilon \rightarrow 1 + r = \epsilon \rightarrow x = \frac{-b \pm \sqrt{\Delta}}{ra} \rightarrow \frac{-1 \pm r}{-\frac{1}{r}} \rightarrow x = -r \quad \boxed{x = -r} \text{ قبول}$$

۱ بین دایره و مستقیمه

$$\Delta > 0 \rightarrow r \Delta = r m^r > 0 \rightarrow r a > \epsilon m^r \rightarrow a > r |m| \rightarrow |m| < \frac{a}{r} \rightarrow -\frac{a}{r} < m < \frac{a}{r} \quad (r)$$

$$\textcircled{1} \text{ و } \textcircled{2} \rightarrow -\frac{a}{r} < m < 0$$

$$y = x^r - 5x + p \quad s = \frac{r - \sqrt{\Delta}}{r} + \frac{r + \sqrt{\Delta}}{r} = r \quad p = \frac{r - \sqrt{\Delta}}{r} \times \frac{r + \sqrt{\Delta}}{r} = \frac{9 - \omega}{9} = \frac{\epsilon}{9}$$

$$\rightarrow y = x^r - 5x + \frac{\epsilon}{9} \rightarrow 9x^r - 15x + \epsilon = y$$

$$ra^r + \beta^r = 1r \rightarrow ra^r + (a^r + \beta^r) = 1r \quad s = \frac{-b}{a} = \frac{1}{r} = \epsilon \quad p = \frac{c}{a} = \frac{m+r}{r} \quad a^r + \beta^r = 5r - r/2$$

$$a^r + \beta^r = 14 - 2\alpha\beta \rightarrow ra^r + \beta^r = 14 - 2\alpha\beta + ra^r = 1r \rightarrow ra^r - 2\alpha\beta = -\epsilon \rightarrow a^r - 9\beta = -r$$

$$a^r - a(\epsilon - a) = -r \rightarrow ra^r - \epsilon a + r = 0 \rightarrow a^r - ra + 1 = 0 \rightarrow a = 1 \rightarrow \beta = r$$

$$\rightarrow 1x^r = \frac{m+r}{r} \rightarrow r = m+r \rightarrow m = \epsilon$$

$$x_5 = \frac{-b}{ra} = r \quad y = \frac{-\Delta}{ra} = 9 \quad c = \omega \rightarrow \frac{-(b^r - r_0 a)}{\epsilon a} = 9 \rightarrow -b^r + r_0 a = 9 \epsilon a$$

$$\frac{-b}{ra} = r \rightarrow b = \epsilon a \rightarrow b = -\epsilon a \rightarrow (-\epsilon a)^r + r_0 a = r_0 \epsilon a \rightarrow 14a^r + 14a = 0 \rightarrow a^r + a = 0 \rightarrow a = 0 \quad a = 1$$

$$a = 0 \text{ قبول نمی شود} \rightarrow a = -1 \rightarrow b = \epsilon \quad y = -x^r + \epsilon x + \omega$$

$$-x^r + \epsilon x + \omega > 0 \quad x \quad | \quad -1 \quad \omega$$

-	+	-
-	0	+
-	0	-

مجموعه جواب: $(-1, \omega)$

$$s = \frac{-b}{a} \quad p = \frac{c}{a} \quad a + \beta = \frac{v}{a} \quad a\beta = \frac{9\beta}{a} \rightarrow a^r = 9 \rightarrow a = \pm 3$$

$$a = +3 \rightarrow r + \beta = \frac{v}{r} \rightarrow \beta = \frac{-r}{r} \quad \times$$

$$a = -3 \rightarrow -r + \beta = \frac{v}{r} \rightarrow \beta = \frac{r}{r} \quad \checkmark \rightarrow \frac{1}{a} + \frac{1}{\beta} = \frac{1}{-3} + \frac{1}{\frac{r}{r}} = -\frac{1}{3} + \frac{r}{r} = \frac{-r+9}{r} = \frac{v}{r}$$

$$s = \frac{-b}{a} = \frac{-m}{1} = -m \quad p = \frac{c}{a} = \frac{-rm}{1} = -rm \quad -m/\beta = \beta^r - rm \rightarrow a^r + \beta^r - rm = A$$

$$m^r, \epsilon m, rm = n \rightarrow m^r - rm - n = 0 \rightarrow (m - \epsilon)(m + r) = 0 \quad m = \epsilon \quad m = -r$$

$$a + \beta = m \rightarrow a + \beta = r \quad a + \beta = -\epsilon$$

s.a.m

$$y_s = \frac{-\Delta}{\epsilon a} = 1 \rightarrow \frac{14 - \epsilon(m) \left(\frac{1\epsilon + m}{r} \right)}{-\epsilon m} = 1 \rightarrow r m = 14 - \epsilon m^r + r m$$

$$\rightarrow r m^r - \epsilon m - 14 = 0 \rightarrow m^r r m - 14 = 0 \rightarrow m = \epsilon \quad \boxed{m = -r}$$

$$m = -r \rightarrow y = -r m^r + \epsilon m + 4 \rightarrow -r m^r + \epsilon m + 4 = 0 \rightarrow x^r r m - r = 0 \quad x = -1 \quad x = r \rightarrow k = r$$

$$(r, y) \quad (0, \epsilon) \quad x_s = \frac{-b}{ra} = r \rightarrow b = -\epsilon a \quad y_s = \frac{-\Delta}{\epsilon a} = 4 \rightarrow \frac{b^r - 14a}{-\epsilon a} = 4$$

$$\rightarrow \frac{14a^r - 14a}{-\epsilon a} = 4 \rightarrow 14a^r - 14a = 4\epsilon a \rightarrow 14a^r + 14a = 0 \rightarrow r a^r + a = 0 \rightarrow a = 0 \quad a = -\frac{1}{r}$$

$$a = -\frac{1}{r} \rightarrow b = \frac{\epsilon}{r} \rightarrow y = -\frac{1}{r} x^r + \frac{\epsilon}{r} x + 4 \rightarrow -\frac{1}{r} x^r + \frac{\epsilon}{r} x + 4 = 0 \rightarrow x^r - \epsilon x - 1r = 0 \rightarrow x = 4 \quad x = -r$$

$$x_1 + x_2 = 4 \quad r = \epsilon$$

$$\epsilon - 14a - 14 + r a^r + \epsilon a + r = 0 \rightarrow r a^r r a - 1 = 0 \rightarrow a = 1 \quad a = -\frac{1}{r}$$

$$a = 1 \rightarrow x^r - 14x + 1r = 0 \rightarrow x = r \quad \boxed{x = 4}$$

$$a = -\frac{1}{r} \rightarrow x^r - \frac{1}{r} x + \frac{\epsilon}{r} = 0 \rightarrow r x^r - 14x + \epsilon = 0 \rightarrow x = r \quad \boxed{x = \frac{r}{r}}$$