

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۵ کلاس: سیاسی A

$$B(r, n) \quad x_m = \frac{t+r}{r} = v \quad y_m = \frac{n-t}{r} = 1 \quad m_{AB} = \frac{n-t}{r-t} = -v \Rightarrow m' = \frac{1}{v}$$

$m(x_m, y_m) \quad A(t, -v) \quad y = \frac{1}{v}x + b \quad 1 = \frac{v}{v} + b \quad b = \frac{t}{v} \Rightarrow \underline{vy - x = t}$

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$$\frac{1}{r} \begin{vmatrix} r & 1 & 1 \\ -t & v & 1 \\ -1 & r & 1 \end{vmatrix} = \frac{1}{r} (r1 - 1 - 1r + v - 9 + t) = \frac{1}{r} (10) = \omega$$

$$d_{BC} = \sqrt{\Delta x^2 + \Delta y^2} = \sqrt{9 + 16} = 5 \quad \omega = \frac{1}{r} \times \omega \times AH \quad AH = r \quad BC - AH = \omega - r = \frac{1}{r} \times r = 1$$

$$m = \frac{1}{r} = \frac{a}{r} \quad a = r \quad d_1: xy - x - v = 0 \quad d_2: xy - x - r = 0 \quad \frac{|C - C'|}{\sqrt{a^2 + b^2}} = \frac{|r - v|}{\sqrt{\omega}} \quad \frac{\omega}{\sqrt{a}} = \sqrt{\omega}$$

$d = \sqrt{\omega} \quad r = \frac{\sqrt{\omega}}{r} \quad s = \frac{\omega}{r} \pi$

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$$x_m = \frac{r+t}{r} = v \quad y_m = \frac{r+1}{r} = r \quad m_{AB} = \frac{v-1}{r-t} = -1 \quad y = -x + b \quad r = -r - b \quad b = \omega$$

$d_{AB}: y = -x + \omega \quad m_{CH} = 1 \quad y' = x + b \quad -r = -1 + b' \quad b' = -r \quad y = x - r$

$$H \begin{cases} y = -x + \omega \\ y = x - r \end{cases} \quad -x + \omega = x - r \quad x = \frac{v}{r} \quad y = \frac{v-t}{r} = \frac{v}{r} \quad H(\frac{v}{r}, \frac{v}{r}) \quad m(r, r) \quad r$$

$d_{MH} = \sqrt{\Delta x^2 + \Delta y^2} = \sqrt{(r - \frac{v}{r})^2 + (r - \frac{v}{r})^2} = \sqrt{\frac{1}{r^2} + \frac{1}{r^2}} = \frac{\sqrt{2}}{r}$

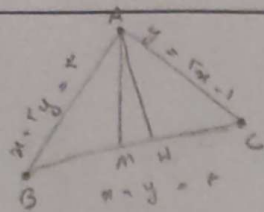
$$m_1 = -\frac{r-m-r}{\omega-m} = \frac{r-m-r}{m-\omega} \quad m_r = -\frac{m+1}{-(r-m-t)} = \frac{m+1}{r-m-t} \quad \frac{r-m-r}{m-\omega} = -\frac{r-m-t}{m+1} = \frac{t-r-m}{m+1}$$

$(r-m-r)/(m+1) = (t-r-m)/(m-\omega) \quad r-m-r = t-m-r \Rightarrow -r-m-r = t-m-r \Rightarrow -r-m-r = t-m-r$

$r-m-r = m-r = -r-m-r + 1+t-m-r \Rightarrow \omega m-r = 1r-m+1n = 0 \quad \Delta = 1r^2 - 4 \times \omega \times 1n$

$= 149 - 440 < 0 \Rightarrow m, \text{ discriminant}$

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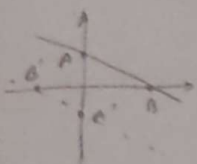


$$A \begin{cases} y = rx - 1 \\ x + ry = r \end{cases} \quad \omega x - r = r \quad x = 1 \quad y = 1$$

$$B \begin{cases} x + ry = r \\ x = y = r \end{cases} \quad \ominus \quad y_B = -1 \quad x_B = \omega$$

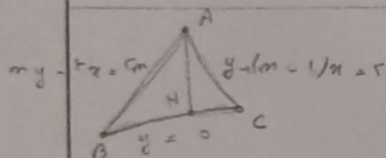
$$C \begin{cases} x = y = r \\ x = rx - 1 \end{cases} \quad x = 1 \quad y = 1 \quad x_C = \frac{\omega}{r} + \frac{1}{r} = \frac{1}{r} \quad y_C = \frac{1}{r} - \frac{1}{r} = 0$$

$$y = -\frac{1}{r}x - b \quad ry + x - b = 0 \quad | -rb | = \sqrt{r} \quad | -rb | = \sqrt{r} \quad b = \pm \frac{\sqrt{r}}{r}$$



$$d_{AB} = \sqrt{r} \quad y = -\frac{1}{r}x + \frac{\sqrt{r}}{r} \Rightarrow A(0, \frac{\sqrt{r}}{r})$$

$$0 = -\frac{1}{r}x + \frac{\sqrt{r}}{r} \quad x = \sqrt{r} \Rightarrow B(\sqrt{r}, 0) \quad d_{AB} = \sqrt{1 + \frac{\omega}{r}} = \sqrt{\frac{r+\omega}{r}} = \sqrt{\frac{r}{r}} = 1$$



$$A \begin{cases} y + (m-1)x = r \\ my - tx = rm \end{cases} \quad y = \frac{m-1}{m-t}x + \frac{r}{m-t} \quad x = -\frac{1}{m-t} \frac{r}{m-1}$$

$$x_A = -\frac{rm - rm}{-r - (m-1)} = 0 \quad y_A = \frac{rm^2 - rm - r}{m^2 - m + t} = r$$

$$B \begin{cases} y = 0 \\ my - tx = rm \end{cases} \quad y = 0 \quad x = -\frac{r}{m} \quad C \begin{cases} y + (m-1)x = r \\ y = 0 \end{cases} \quad y = 0 \quad x = \frac{r}{m-1} \quad d_{BC} = \frac{r}{m-1} + \frac{m}{r} A$$

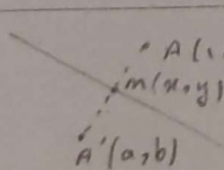
$$S = \frac{1}{2} \times AH \times BC = \frac{\omega}{r} \Rightarrow BC = \frac{\omega}{r} = \frac{r}{m-1} + \frac{m}{r} \quad am - \omega = t + m^2 - m \quad m^2 - 9m + 9 = 0$$

$$P = \frac{9}{1} = 9$$

$$\alpha = 0 \quad d = -r$$

$$A(0, r) \quad d' \parallel d \quad r = \frac{0 + x_{A'}}{r} \quad x_{A'} = r - r = -r \quad y_{A'} = -1$$

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$$A(1, r) \quad x_m = \frac{a+1}{r} \quad y_m = \frac{b+r}{r} \quad \frac{b+r}{r} = \frac{a+1}{r} \quad a$$

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

$$a+r = -a+1 \quad ra = -4 \quad a = -4 \quad b = 9$$

$$rb - a = 1 \quad r = 1 \quad a = 1$$

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