

نام و نام خانوادگی جناب پاسخنامه تشریحی تکلیف شماره ۱۶۰۰ کلاس پایه دهم ریاضی ۲

$$A(4, -4), B(7, 1)$$

$$\overline{AB} \text{ ميل } \rightarrow \frac{y_B - y_A}{x_B - x_A} = \frac{1 - (-4)}{2 - 5} = \frac{14}{-3} = -\frac{14}{3}$$

نقطه میانی $\frac{1}{2}$ خط $AB \rightarrow M$

$$\frac{x_A + x_B}{2} \rightarrow \frac{1 + 2}{2} = 3$$

$$\frac{y_A + y_B}{2} \rightarrow \frac{-4 + 1}{2} = 1$$

$$\rightarrow m' \rightarrow -v \times m' = -1 \rightarrow m' = \frac{1}{v}$$

$$\frac{\overline{AB}}{\overline{AB}} \rightarrow y-1 = \frac{1}{v}(x-3) \rightarrow y-1 = \frac{1}{v}x - \frac{3}{v}$$

$$\rightarrow y = \frac{1}{v}x + \frac{f}{v}$$

$$\begin{aligned} A(3, 1) \\ B(-2, 5) \\ C(-1, 3) \end{aligned}$$

فاصله نقطه A از خط $AB =$ طول ارتفاع AH

BC طوله $\rightarrow \sqrt{(y_B - y_C)^2 + (x_B - x_C)^2}$

$$BC \text{ bis} \rightarrow m_{BC} : \frac{v-r}{-x(-1)} = \frac{x}{-r} \rightarrow BC : y = -\frac{x}{r}n + \frac{\omega}{r}$$

$$\hookrightarrow ry + xn - \omega = 0$$

$$\sqrt{(14) + (9)} = 5$$

BC JA now $\rightarrow \frac{|r(1) + r(r) - \omega|}{\sqrt{kr + 9}} = \frac{10}{\omega} = r \rightarrow \boxed{\omega - r = r}$

$$y = x + v \rightarrow m = \frac{1}{r}$$

$$xy = an + r \rightarrow m = \frac{a}{\Sigma} = \frac{1}{r} \rightarrow a = r$$

$$\begin{aligned} y - x - v &= 0 \xrightarrow{x^T} y - x - 1\varepsilon = 0 \\ y - x - v &= 0 \longrightarrow y - x - \varepsilon = 0 \end{aligned}$$

$$\text{فاصله ی خط موازی} = \text{قطر دایره} = r_v \rightarrow \frac{|c-c'|}{\sqrt{a^2+b^2}} = \frac{|-12-(-2)|}{\sqrt{14+2}} = \frac{10}{2\sqrt{5}} = \frac{5}{\sqrt{5}} = r_v \rightarrow r = \frac{r}{\sqrt{5}}$$

$$\text{مساحت دایره} = \pi v^2 = \left(\frac{r}{\sqrt{5}}\right)^2 \pi = \boxed{\frac{9}{5} \pi}$$

$$A(\gamma, \nu)$$

$$\begin{matrix} A(2,3) \\ B(2,1) \\ C(-1,-3) \end{matrix} \rightarrow \overline{AB} \text{ منتهى } \rightarrow M \left/ \begin{array}{c} \frac{x_A + x_B}{2} \\ \frac{y_A + y_B}{2} \end{array} \right. \rightarrow (r, r)$$

$$\text{MHC} \rightarrow \sqrt{(x_m - x_H)^r + (y_m - y_H)^r} = \sqrt{\left(r - \frac{v}{r}\right)^r + \left(r - \frac{r}{r}\right)^r} = \frac{1}{\sqrt{r}} = \boxed{\frac{\sqrt{r}}{r}}$$

$$m_{AB} = \frac{y}{-y} = -1 \rightarrow AB: y = -x + \omega$$

$$m_{CH} = -1 \times m_{CH} = -1 \rightarrow m_{CH} = 1 \rightarrow CH: y = x - 2$$

$$\begin{cases} y+n=\omega \\ y-n=-r \end{cases} \rightarrow \begin{matrix} y = \frac{r}{r} \\ x = \frac{v}{r} \end{matrix} \rightarrow H\left(\frac{v}{r}, \frac{r}{r}\right)$$

$$(r_m - r)u + (\omega - m)y - v = 0 \rightarrow m_1 = -\frac{r_m - r}{\omega - m}$$

$$(m+1)n - (r_m - \varepsilon)y + 1 = 0 \rightarrow mr = \frac{m+1}{r_m - \varepsilon}$$

$$\rightarrow \frac{r_{m-r}}{\omega-m} = \frac{r_{m-\Sigma}}{m+1} \rightarrow r_{m^r+m-r} = -r_{m^r+1\Sigma m-r_0}$$

$$m_1 \cdot m_r = -1 \rightarrow \left(-\frac{r_{m-1}}{\omega - m} \right) \left(\frac{m+1}{r_{m-1}} \right) \neq 1$$

برای هیچ مقدار m خطا هاب $\Delta K_0 \rightarrow 5m^2 - 13m + 11 = 0$ هم محذور نمی شوند

$\begin{cases} ry = r-n \\ y = r-n-1 \end{cases} \rightarrow x=1, y=1$ $\begin{cases} ry = r-n \\ ry = n-r-n \end{cases} \rightarrow x=\omega, y=-1$ $\begin{cases} y = r-n-1 \\ y = \varepsilon-n \end{cases} \rightarrow x=\frac{\omega}{r}, y=\frac{r}{r}$	$A _1 \quad B _{\omega} \quad C \frac{\omega}{r}$ $m_{BC} = \frac{\frac{r}{r} + 1}{\frac{\omega}{r} - \omega} = \frac{10/r}{-10/r} = -1 \rightarrow y+1 = -(n-\omega) = y = -n+\varepsilon$ $M(\frac{10}{r}, \frac{r}{r}) \Rightarrow AM = \sqrt{(\frac{10}{r})^2 + (\frac{1}{r})^2} = \frac{\omega\sqrt{r}}{r}$ $AM = \frac{\omega\sqrt{r}}{r} \rightarrow \frac{AM}{AH} = \frac{\frac{\omega\sqrt{r}}{r}}{\frac{r}{\sqrt{r}}} = \frac{10}{r} = \frac{\omega}{r}$ $AH = \frac{ 1+1-\varepsilon }{\sqrt{r}} = \frac{r}{\sqrt{r}}$	6
$\frac{x}{A} + \frac{y}{B} = 1 \rightarrow \frac{x\beta + yA}{AB} = 1 \rightarrow AB = x\beta + yA$ $\frac{\beta}{A} = \frac{1}{r} \rightarrow A = r\beta$ $\frac{ AB }{\sqrt{A^2 + B^2}} = \sqrt{r_0} \rightarrow \frac{r\beta^2}{\sqrt{\omega B^2}} = \sqrt{r_0} \rightarrow \frac{r\beta}{\sqrt{\omega}} = \sqrt{r_0} \rightarrow r\beta = \sqrt{100} = 10 \rightarrow \beta = \omega$ $A = 10$ $\sqrt{r\omega + 100} = \omega\sqrt{\omega}$		7
$my - \varepsilon n = rm \rightarrow y = \frac{r}{m}n + r$ $y + mn = x + r \rightarrow y = (1-m)n + r$ $\frac{r}{m}n + r = (1-m)n + r \Rightarrow \frac{r}{m}n = (1-m)n \Rightarrow \frac{r}{m} = 1-m \Rightarrow \frac{r}{m} = 1-m \Rightarrow \frac{r}{m} = 1-m$ $S = \frac{1}{r} \left \frac{\varepsilon}{m-1} - (-m) \right = \frac{\omega}{r} \rightarrow \left \frac{r+m(m-1)}{m-1} \right = \omega \rightarrow \frac{r+m(m-1)}{m-1} = \omega \rightarrow \omega m - \omega = r + m^2 - m \rightarrow m = r$	$y = \frac{r}{m}n + r \Rightarrow x = \frac{-m}{r} \Rightarrow \beta = \frac{-m}{r}$ $y = (1-m)x + r \Rightarrow x = \frac{-r}{1-m} = \frac{r}{m-1} \Rightarrow c = \frac{r}{m-1}$ $-\omega x + \omega = m^2 - m + \varepsilon$ $m^2 + \varepsilon m - 1 = 0 \rightarrow m = \frac{-\varepsilon \pm \sqrt{\varepsilon^2 + 4}}{2} \rightarrow -r \pm \sqrt{\omega} = m$ $m = r$	8
$\frac{a+0}{r} = r \rightarrow a = \varepsilon$ $\frac{B-r}{r} = -r \rightarrow B = -1$ $y = r-n-r$ $m = r$ $y+1 = r(x-\varepsilon) \rightarrow d' : y = rx - 9$	$P = (-r+\sqrt{\omega})(-r-\sqrt{\omega})(r), (r-\omega)(r) = -r$	9
$y-r = -(n+1) \Rightarrow y = -n+r$ $-n+r = n+\omega \rightarrow -rn = r \rightarrow n = -1$ $y = \varepsilon$ $\frac{r+b}{r} = \varepsilon \rightarrow b = 4$ $\frac{1+a}{r} = -1 \rightarrow a = -r$ $rb-a = 1r+r = \omega$	$m = \frac{1}{r} = 1 \Rightarrow m' = -1$	10