

۲۰

یازدهم فصل

تکلیف شماره ۱۹

ستایش عیسی

Page: ()

SUBJECT:

Year: Month: Day:

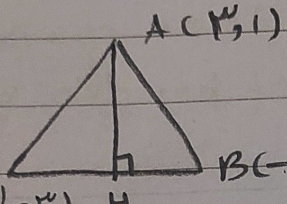
(۲, ۱) (۳, ۲)

M (۳, ۱)

$$\frac{y}{x} = r \quad a = \frac{\Delta y}{\Delta x} = \frac{2-1}{3-2} = \frac{1}{1} = 1$$

$$\frac{1-y}{x} = 1 \Rightarrow a' = \frac{1}{1} = 1$$

$$y-1 = \frac{1}{1}(x-2) \rightarrow y = \frac{1}{1}x - \frac{2}{1} + 1 \Rightarrow y = \frac{1}{1}x - \frac{1}{1}$$



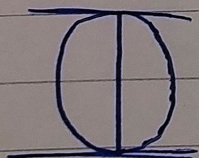
$$BC = \sqrt{3^2 + 2^2} = \sqrt{13}$$

$$a = \frac{\Delta y}{\Delta x} = \frac{3-1}{-1-3} = \frac{2}{-4} = -\frac{1}{2}$$

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

$$AH = \frac{|1 \cdot 2 + 3 - 5|}{\sqrt{1^2 + 2^2}} = \frac{0}{\sqrt{5}} = 0$$

$$BC - AH = \sqrt{13} - 0 = \sqrt{13}$$



$$xy = ax + r \rightarrow xy - ax - r = 0 \Rightarrow xy - ax - 1 = 0$$

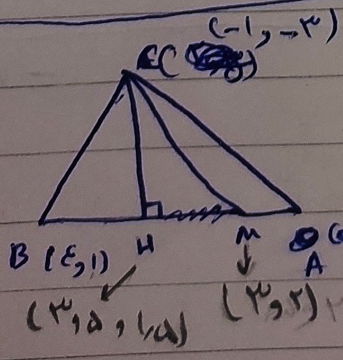
$$\frac{y}{x} = \frac{1}{ax}$$

$$xy - ax - 1 = 0$$

$$r = b = \frac{|c - c'|}{\sqrt{a^2 + b^2}} = \frac{|-1 - (-1)|}{\sqrt{1^2 + 1^2}} = \frac{0}{\sqrt{2}} = 0$$

$$\Rightarrow r = \frac{3\sqrt{5}}{5} = \frac{3}{\sqrt{5}}$$

$$S = \pi r^2 = \pi \times \left(\frac{3}{\sqrt{5}}\right)^2 = \frac{9}{5}\pi$$



MH = 9

$$a_{AB} = \frac{\Delta y}{\Delta x} = \frac{1-2}{-1-3} = \frac{-1}{-4} = \frac{1}{4}$$

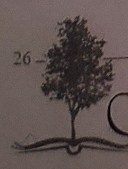
$$a_M = \frac{2-1}{3-1} = \frac{1}{2} \quad y_M = \frac{1+3}{2} = 2$$

$$AB \rightarrow y-1 = \frac{1}{4}(x+1) \rightarrow y = \frac{1}{4}x + \frac{5}{4}$$

$$CH \rightarrow y+3 = 1(x+1) \rightarrow y = x-2$$

$$x-2 = -\frac{1}{4}x + \frac{5}{4}$$

$$r_M = \sqrt{\left(\frac{1}{4}\right)^2 + \left(\frac{1}{4}\right)^2} = \frac{\sqrt{2}}{4}$$



Senobar

$$\begin{cases} (m+1)x - (r_m - \epsilon)y + 1 = 0 \rightarrow m_1 = \frac{-(m+1)}{-(r_m - \epsilon)} = \frac{m+1}{r_m - \epsilon} \\ (r_m - r)x + (\omega - m)y - v = 0 \rightarrow m_2 = \frac{-(r_m - r)}{r_m - r} = \frac{r_m - r}{m - \omega} \end{cases}$$

$$m_1 \times m_2 = -1$$

$$\frac{r_m - r}{m - \omega} = \frac{-(r_m - \epsilon)}{m + 1}$$

$$r_m r - r m + r m - r = -r m^2 + \epsilon m + 1 - m - r$$

$$\omega m^2 - 1 r_m + 1 \omega = 0 \rightarrow \Delta < 0$$

هیچگاه این دو خط بر هم نمی‌خورند

$$\begin{cases} AB: x + ry = r \\ AC: y = r_m - 1 \\ BC: x + y = \epsilon \end{cases}$$

$y = \frac{r}{r} - \frac{x}{r}$

$AM \sim \frac{AH}{\epsilon} \rightarrow ? \rightarrow \frac{\frac{\omega \sqrt{r}}{r}}{\sqrt{r}} = \frac{\omega}{r}$

$AB \begin{cases} y = \frac{r}{r} - \frac{x}{r} \\ y = r_m - 1 \end{cases} \rightarrow A(1, 1)$

$AB \begin{cases} y = \epsilon - x \\ y = \frac{r}{r} - \frac{x}{r} \end{cases} \rightarrow B(\omega, -1)$

$AC \begin{cases} y = \epsilon - x \\ y = r_m - 1 \end{cases} \rightarrow C(\frac{\omega}{\epsilon}, \frac{1}{\epsilon})$

$M(\frac{\frac{\omega}{r} + \omega}{2}, \frac{-1 + \frac{1}{\epsilon}}{2})$

$M(\frac{1}{r}, \frac{r}{r})$

$AM = \sqrt{(\frac{1}{r})^2 + (\frac{r}{r})^2} = \sqrt{\frac{\omega}{r}} = \frac{\omega \sqrt{r}}{r}$

$AH = \frac{|1 + 1 - \epsilon|}{\sqrt{r}} = \sqrt{r}$

$m = -\frac{1}{r}$ فاصله از خط $= \sqrt{r} = r\sqrt{\omega}$

$\sqrt{m^2 + \epsilon^2} = \sqrt{\omega^2} = \sqrt{\omega} \times \omega$

$\omega = \omega$

$AB = \omega \sqrt{\omega}$

$\omega \times r_m = \sqrt{r} \times \omega \sqrt{r}$

$\frac{\omega \times r_m}{r} = \omega \times \frac{r_m}{r}$

Senobar

Year: Month: Day:

$$y = 0 \rightarrow m = -\frac{r}{1}$$

$$my - (ax = r)m^r$$

$$y = \frac{r}{m} a + r$$

$$y = 0 \rightarrow m = -\frac{r}{1-m} = \frac{r}{m-1}$$

$$y + ma = r + r$$

$$\frac{\omega}{r} \times \frac{r}{r} = \frac{\omega}{r}$$

-1

(5)

$$|m_A - m_B| = \frac{\omega}{r} \rightarrow \left| \frac{r}{m-1} + \frac{m}{r} \right| = \frac{\omega}{r}$$

$$\left| \frac{r + m^2 - m}{r(m-1)} \right| = \frac{\omega}{r}$$

$$m^2 - m + r = \omega m - \omega \rightarrow m^2 - 4m + 9 = 0$$

$$(m-3)^2 = 0 \rightarrow m = 3$$

$$m = 3 \rightarrow y = -1 \times 3 = -3$$

$$m^2 - m + r = -\omega m + \omega$$

$$m^2 + 4m - 1 = 0 \rightarrow P = -1$$

$$a = r \rightarrow y = 2a - r$$

$$rM - A = A'$$

$$A = (2, 1) \quad F = 2 \quad -r - 1 = -\omega \quad A' = (2, -\omega)$$

$$y + \omega = 2(a - r) \rightarrow y = 2a - 4$$

-4

(5)

$$A(1, 2)$$

$$y = a + d$$

$$A'(a, b) \quad 2b - a = 9 - 1$$

$$a = 1$$

$$a' = -1$$

$$rM - A = A'$$

$$y - 2 = -(a + 1)$$

$$\begin{cases} y = -a + 3 \\ y = a + d \end{cases}$$

$$a + d = -a + 3$$

$$2a = -r$$

$$m = -1$$

$$y = +r$$

$$a = -r - 1 = -3$$

$$b = +M + r = 4$$

$$M = (-1, +r)$$

$$2b - a = 12 + 3 = 15$$