

نام و نام خانوادگی: شماره ۱۴۰۰ کلاس: پاسخنامه تشریحی تکلیف شماره ۱۴۰۰

$$\frac{-y-1}{x-2} = \frac{-1x}{2} = -\frac{1}{2} \rightarrow -\frac{1}{2}x + \frac{1}{2} \xrightarrow{\text{عوض}} \boxed{\frac{1}{2}x + \frac{1}{2}}$$

$$M\left(\frac{x+2}{2}, \frac{-y+1}{2}\right) = (2, 1)$$

$$\left(\frac{1}{2}x + \frac{1}{2} = 1\right)$$

$$b = \frac{1}{2}$$

$$BC \text{ طول} = \sqrt{9 + (-2)^2} = \Delta$$

$$\text{فاصله A تا خط BC (AH)} = \text{فاصله A تا خط BC}$$

$$|2 \times (-2) - (-4) \times 1| = 10$$

$$AH = \frac{10}{BC} = \frac{10}{5} = 2$$

$$BC - AH = 5 - 2 = 3 \text{ امتداد خط BC}$$

$$xy - x = y \rightarrow y = \frac{1}{x} + \frac{1}{x} \rightarrow m = \frac{1}{x}$$

$$y = am + 1 \rightarrow y = \frac{a}{x} + \frac{1}{x} \rightarrow m = \frac{a}{x}$$

$$\frac{a}{x} = \frac{1}{x} \rightarrow \boxed{a = 2}$$

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

$$r = \frac{d}{2} \rightarrow \frac{0}{2}$$

$$S = Rr^2 = R \left(\frac{r}{\sqrt{2}}\right)^2 = \boxed{\frac{9R}{2}}$$

$$M\left(\frac{2+1}{2}, \frac{1+1}{2}\right) = (1.5, 1)$$

$$MA \cdot B = -1 \rightarrow y = -x + 2$$

$$MCH = 1 \rightarrow CH: y = x - 2$$

$$y + 1 = 1(x + 2) \rightarrow y = x + 1$$

$$x + 2 = -x + 2 \rightarrow (x = \frac{2}{2}, y = \frac{2}{2}) H$$

$$\vec{MH} = \left(\frac{2}{2} - 1, \frac{2}{2} - 1\right) = \left(-\frac{1}{2}, \frac{1}{2}\right)$$

$$MH = \frac{|-1 - 1 + 1|}{\sqrt{1 + 1}} = \frac{\sqrt{2}}{2}$$

$$\sqrt{\left(-\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^2}$$

$$MH = \boxed{\frac{\sqrt{2}}{2}}$$

$$y = \frac{-xm + 1}{a - m}x + \frac{1}{a - m}$$

$$y = y = \frac{m+1}{xm-1}x + \frac{1}{xm-1}$$

$$mm' = -1$$

$$\Delta < 0$$

$$10m - 2m^2 - 2 + 8m = 2m^2 + 2m - 2$$

$$\frac{m+1}{xm-1} = \frac{a-m}{xm-1}$$

$$am^2 - 13m + 11 = 0$$

$$m^2 - 13m + 11 = 0$$

$$15m - 2m^2 - 2 = 2m^2 + 2m - 2$$

$$am^2 - 13m + 11 = 0$$

$$m = \frac{1}{2} \quad m = 2$$

$$m = 2$$