

نام و نام خانوادگی: کلاس: ۱۴ پاسخنامه تشریحی تکلیف شماره ۱۴

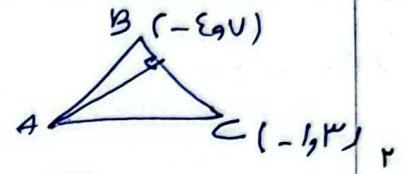
BC(۹۸) (۴-۹)

شیب $AB = \frac{14}{-2} = -7$ $\xrightarrow{\text{شیب عمود بر شیب}} m = \frac{1}{7}$
 $\frac{1}{7}x + b \rightarrow b = +1 - \frac{3}{7} = \frac{4}{7}$
 $y = \frac{1}{7}x + \frac{4}{7} \rightarrow \boxed{7y = x + 4}$
 مرکز $(\frac{14}{2}, \frac{-9+1}{2}) = (7, -4)$

طول $BC \rightarrow \sqrt{(-1-(-9))^2 + (3-1)^2} = 8$

شیب $BC \rightarrow m = \frac{-9}{8} \rightarrow 9x + 8y - 8 = 0$

فاصله $AH = \frac{|9(7) + 8(-4) - 8|}{\sqrt{9^2 + 8^2}} = 2$



$d = 2 = (3)$

$2y - x = 0 \rightarrow m = \frac{1}{2} \rightarrow \frac{a}{2} = \frac{1}{2} \rightarrow a = 1 \rightarrow y = \frac{1}{2}x + 1$

فاصله $d = \frac{|1 - 1 - (-1)|}{\sqrt{(-1)^2 + 1^2}} = \frac{1}{\sqrt{2}} \rightarrow r = \frac{\frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}}} = 1$

$S = \pi r^2 = \pi$

$M = (\frac{14}{2}, \frac{3+1}{2}) = (7, 2)$

شیب $AB = -1$ $\xrightarrow{\text{شیب عمود بر شیب}} m = 1$ $\rightarrow y = x - 2$

فاصله $d_{\text{مرکز}} = \sqrt{(\frac{14}{2} - 1)^2 + (\frac{3+1}{2} - 2)^2} = \sqrt{\frac{1}{2}} = \frac{\sqrt{2}}{2}$

$m = -\frac{3m-2}{2-m}$ $\rightarrow m' = \frac{m+1}{m-2} \rightarrow \frac{3m-2}{2-m} \times \frac{m+1}{m-2} = 1$

$(3m-2)(m+1) = (2-m)(m-2) \rightarrow 3m^2 + m - 2 = -m^2 + 4m - 4$

$4m^2 - 3m + 2 = 0 \rightarrow \Delta < 0$ m ندارد

