

تلف ۱۵

۱۹, ۲۵

اسمیت کامل تو عکس باشه!

$$\frac{2-12}{2-5} = \frac{4}{-1} = -4$$

$$y = -4x + 18 \checkmark$$

(۷۵) (الف) -

$$y = -2x - \frac{1}{2}$$

$$y = -2x + 14 \checkmark$$

$$y = -\frac{1}{2}x + \frac{1}{2}$$

$$y = 2x - 10 \checkmark$$

(۴, ۲)

$$y - 2 = \sqrt{2} (x - 4) \Rightarrow y = \sqrt{2}x - 4\sqrt{2} + 2$$

دقت!

$$\sqrt{2^2 + 4^2} = 4 \checkmark$$

(۲) (الف) -

$$2x + 4y - 2 = 0$$

$$\frac{|2+12-2|}{5} = \frac{12}{5} = 2.4 \checkmark$$

$$\begin{aligned} 4x + 2y &= 1 \\ 4x + 2y &= 12 \end{aligned}$$

$$4x + 2y = \frac{2-12}{2} \Rightarrow 4x + 2y = -5 \checkmark$$

(۲) (الف) -

$$\begin{cases} 2x + 2y = 6 \\ 4x + 2y = 12 \end{cases} \Rightarrow \begin{cases} 2x + 2y = 1 \\ 4x + 2y = 1 \end{cases}$$

$$\frac{4}{\sqrt{20}} \checkmark$$

$$\frac{|2x+4y-2|}{\sqrt{2^2+4^2}} = \frac{|2x-2y-1|}{\sqrt{1+1}} \Rightarrow |2x+4y-2| = |2x-2y-1|$$

(۲) -

$$2x+4y-2 = 2x-2y-1 \Rightarrow x-5y = -1 \checkmark$$

$$2x+4y-2 = -(2x-2y-1) \Rightarrow 4x+y = 1 \checkmark$$

دقت!

$$\tan \alpha = \left| \frac{a}{-a} \right| \Rightarrow 1$$

$$\begin{aligned} y &= -2x + 2 \\ y &= 2x + 5 \end{aligned}$$

$$a = \frac{2}{4} \checkmark$$

(۲) -

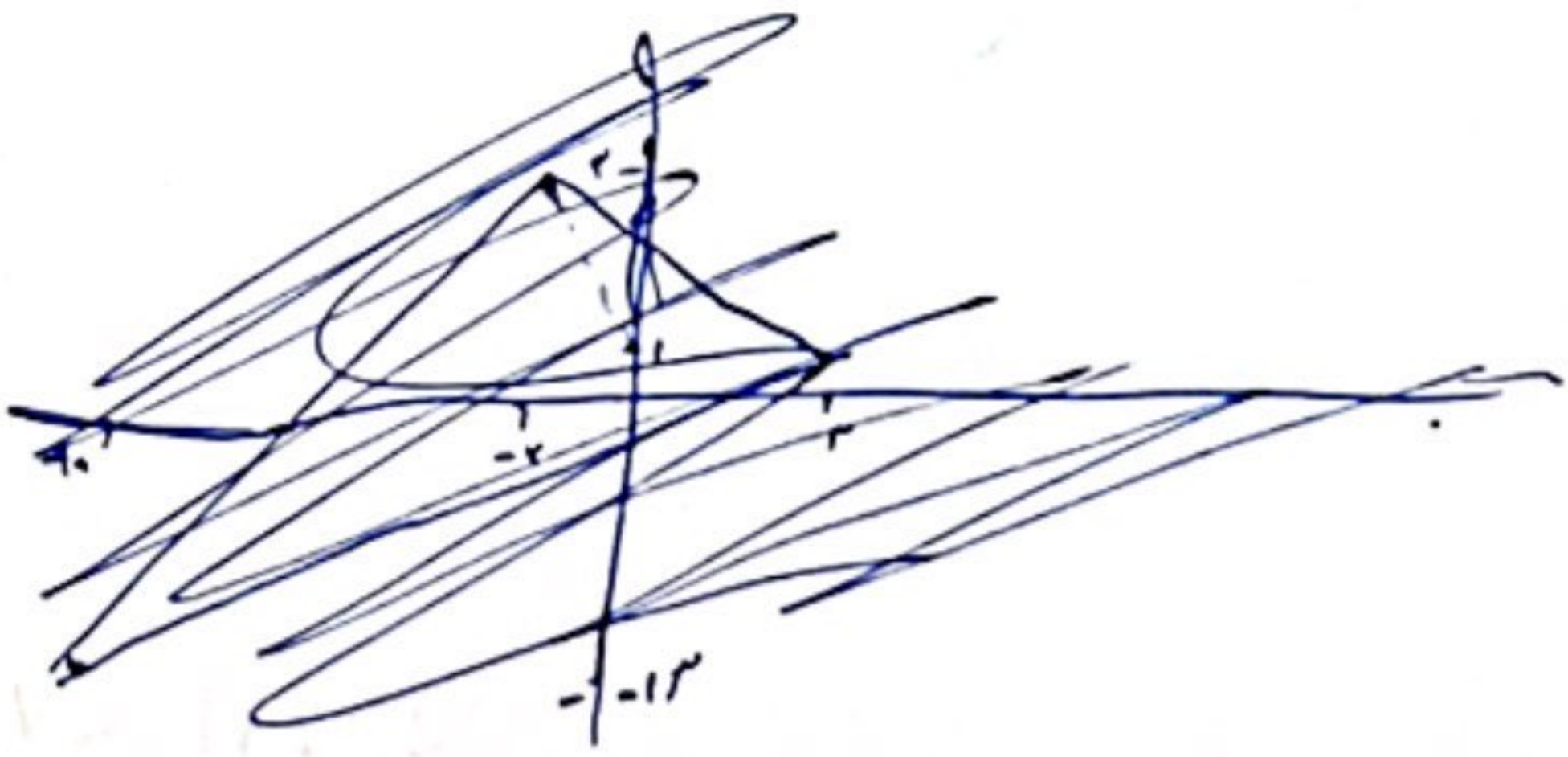
$$\sqrt{1^2 + 4^2} = 4 \checkmark$$

(۲) (الف) -

$$\begin{pmatrix} 1 & -1 \\ 1 & 1 \end{pmatrix} \checkmark$$

$$\begin{pmatrix} 1 & -3 \\ 1 & -3 \end{pmatrix} \checkmark$$

(۲) (الف) -



$$\vec{AB} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$\vec{AC} = \begin{pmatrix} -1 \\ -1 \end{pmatrix} \quad \frac{1}{2} \begin{vmatrix} -a & 2 \\ -1 & -1 \end{vmatrix} = 4 \checkmark$$

(۲) -

$$y = \frac{r^2 x - 1}{r^2 x + r}$$

(ع)

$$y = \frac{r^2 x + 1}{r^2 x - r}$$

(د)

$$y = \frac{r^2 x + 1}{-r^2 x - r}$$

(ح)

$$-y = \frac{r^2 x + 1}{r^2 x - r}$$

(الف)

(2)

والجواب بنوع

$$\frac{x'}{y'} = x - r \Rightarrow x = x' + r$$

$$y' = y + r \Rightarrow y = y' - r$$

$$y' - r = \frac{r(x' + r) + 1}{x' + r - r}$$

$$\rightarrow y = \frac{rx' + r^2 + 1}{x' - r}$$

(ج) ->

(1,5)

$$x' = x - r \Rightarrow x = x' + r$$

$$y' = y - r \Rightarrow y = y' + r$$

$$y' + r = \frac{r(x' + r) + 1}{x'}$$

$$\rightarrow y' = \frac{r}{x'}$$

(ب)

$$\begin{cases} r^2 x + r^2 y = r \Rightarrow r^2 x + r^2 y = r \\ -r^2 x + r^2 y = 1 \Rightarrow -r^2 x + r^2 y = r^3 \end{cases}$$

$$17y = -r \quad x = \frac{1/r}{17}$$

(2)

(الف) - 1/5

$$x = \frac{\begin{vmatrix} r & r \\ -r & 1 \end{vmatrix}}{\begin{vmatrix} r & r \\ -r & 1 \end{vmatrix}} = \frac{+1/r}{-17} = \frac{1/r}{17}$$

$$y = \frac{\begin{vmatrix} r & r \\ 1 & 1 \end{vmatrix}}{\begin{vmatrix} r & r \\ -r & 1 \end{vmatrix}} = \frac{-1}{-17} = -\frac{1}{17}$$