

(20)

$$A(-1, 1) \quad B(1, 1) \rightarrow \frac{m-1}{1+1} = -\frac{1}{1} \rightarrow m-1 = -1 \rightarrow m=0 \rightarrow \overline{AB} = \sqrt{\left(\frac{m-1}{1}\right)^2 + (1)^2} = \sqrt{2}$$

$$S_{ABCD} = \sqrt{2} \times \sqrt{2} = \boxed{2}$$

$$A(-1, 1) \quad B(1, 1) \quad C(0, 1) \quad D(-1, 1+1) \rightarrow m_{CD} = m_{AB} = \frac{1}{-1-1} = -\frac{1}{2} \rightarrow 1 = -\frac{1}{2} \rightarrow 2 = -1$$

$$m_{AD} = m_{CB} = \frac{1+1-1}{-1-0+1} = \frac{1}{0} \rightarrow \text{undefined} \rightarrow y=1$$

$$A(-1, 1) \quad D\left(-\frac{0}{1}, 1\right) \rightarrow \overline{AD} = \sqrt{\left(\frac{1-1}{1}\right)^2 + \left(1 - \frac{0}{1}\right)^2} = \frac{1}{1}$$

$$A(-1, 1) \quad B(1, 1) \rightarrow \overline{AB} = \sqrt{(1-1)^2 + (1-1)^2} = 0$$

$$\frac{1}{1} = \frac{0}{0} + \frac{0}{1} + \frac{0}{1} = \boxed{1}$$

$$r \tan \alpha + (m^2 - 1) \gamma = r \rightarrow \tan \alpha = m = \tan \gamma \cdot \sqrt{r} \rightarrow \frac{-r \tan \alpha}{m^2 - 1} = \sqrt{r}$$

$$\sqrt{r} \tan^2 \alpha - \sqrt{r} = -r \tan \alpha \rightarrow \alpha - \beta = \frac{\sqrt{2}}{|a|} = \frac{r}{\sqrt{r}} \times \frac{\sqrt{r}}{\sqrt{r}} = \boxed{\frac{r \sqrt{r}}{r}}$$

$$A(1, 4) \quad B(2, 3) \quad C(4, 11) \rightarrow m_{BC} = \frac{11-3}{4-2} = \frac{8}{2} = 4 \rightarrow y = 4x + b \rightarrow \begin{matrix} r = 4 + b \\ b = -r \\ y = 4x - r \end{matrix}$$

$$A \text{ noktası } BC \text{ doğrusu } = \frac{|ax_0 + by_0 + c|}{\sqrt{a^2 + b^2}} = \frac{|y - 4x + r|}{\sqrt{r^2 + 1}} = \frac{|4 - 2 + r|}{\sqrt{2}} = \frac{r}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \boxed{r \sqrt{2}}$$

$$AB = y + 4x = 4 \quad AC = ry - 4x = 14 \quad BC = ry - 4x = -14$$

$$4 - 4x = \frac{4x - 14}{r} \rightarrow 4r - 4x = 4x - 14 \rightarrow 4r = 8x - 14 \rightarrow x = \frac{r}{2}, y = 1 \rightarrow B\left(\frac{r}{2}, 1\right)$$

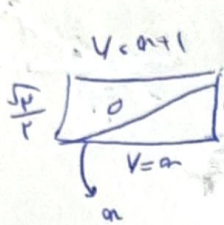
$$A \text{ noktası } BC \text{ doğrusu } = \frac{|ax_0 + by_0 + c|}{\sqrt{a^2 + b^2}} = \frac{|(y - 4x - 14)|}{\sqrt{r^2 + 14}} = \frac{|4 - 2 - 14|}{\sqrt{r^2 + 14}} = \frac{r}{0} = r, r$$

$$\left| \frac{1}{-4} \right| \left| \frac{-r}{1} \right| \rightarrow m = \frac{4-2}{0+\frac{r}{2}} = -1 \rightarrow y = -1x + b \rightarrow -4 = b \rightarrow y = -1x - 4$$

$$\left| \frac{1}{2} \right| \rightarrow y = -1x - 4 \rightarrow x = -1x - 4 \rightarrow 2x = -4 \rightarrow x = -2, y = \frac{-r}{1}$$

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

$$y - ay = 1 \quad ay - a = a - 1 \rightarrow \dots \rightarrow a = \frac{1}{a} \rightarrow a \leq 1 \rightarrow a \leq 1 \rightarrow y \leq a$$

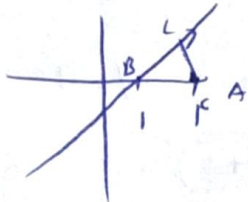


$$\frac{|f-c|}{\sqrt{a^2+b^2}} = \frac{1}{\sqrt{r}} = \frac{\sqrt{r}}{r} \rightarrow \dots \rightarrow \frac{r}{r} + a^2 \rightarrow a \cdot \frac{\sqrt{r}}{r}$$

$$S = \frac{\sqrt{r}}{r} \times \frac{\sqrt{r}}{r} = \frac{r}{r} = 1$$

$y, n+1$ (y)

$$A(x_0) \quad a - y \leq 1$$



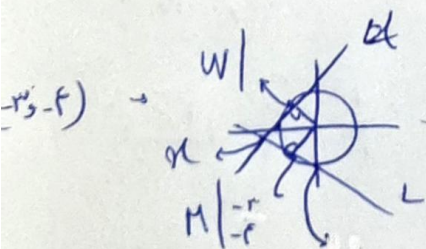
$$S_{max} = \dots = AC = BC$$

$$A(x_0) = \frac{|ax_0 + by_0 + c|}{\sqrt{a^2 + b^2}} = \frac{|f-1|}{\sqrt{1}} = \frac{r}{1} = \frac{r\sqrt{1}}{1}, \quad \overline{AB} = f-1 = r$$

$$r^2 = \left(\frac{r\sqrt{1}}{1}\right)^2 + BC^2 \Rightarrow BC = \frac{1}{1} \Rightarrow BC = \frac{1}{\sqrt{1}} \rightarrow S_{max} = \frac{1}{r} \times \frac{r\sqrt{1}}{1} \times \frac{1}{\sqrt{1}} = \frac{r\sqrt{1}}{r} = 1$$

$$\left(\frac{-1}{r}, a\right) \left(\frac{-1}{r}, b\right) \rightarrow \frac{a-b}{\frac{-1}{r} + \frac{1}{r}} = \sqrt{r} \rightarrow b-a = \frac{\sqrt{r}}{4} \rightarrow \overline{AB} = \sqrt{\left(\frac{b-a}{\frac{1}{r}}\right)^2 + \left(\frac{-1}{r} + \frac{1}{r}\right)^2}$$

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



$$\Rightarrow x_W = -r, \quad y_W = r$$

$$m_L = \frac{-r}{f} \Rightarrow m_d = \frac{r}{f} \quad y_L = \frac{-r}{f} \times a = \frac{-r}{f}$$

$$d \rightarrow y = \frac{f}{r} x + \frac{r}{f} \Rightarrow \frac{r}{f} \times a = \frac{-r}{f} \Rightarrow a = -1, \quad -1 \times -1 = 1$$