

$x = -r^+ \quad y \left[\frac{r+r^+}{r} \right] + a \left[\frac{-r+r^+}{r} \right]$ $x = -r^- \quad y \left[\frac{r+r^+}{r} \right] + a \left[\frac{-r+r^+}{r} \right]$	۱
$\left[r \sinh \frac{a}{r} - 1 \right] \rightarrow \left[r \left(\frac{1}{r} \right) - 1 \right] \rightarrow \left[0 - 1 \right] = -1$ $x = \frac{r}{r}$	۲
$\left[r \left(\frac{1}{r} \right) + \frac{1}{r} \right] = \left[\frac{1}{r} + \frac{1}{r} \right] = \frac{2}{r}$ $x = \frac{1}{r}$	۳
$x < \frac{1}{r} \rightarrow x^2 < \frac{1}{r^2} \rightarrow x^2 > r^2 \rightarrow \frac{r}{x^2} > 1 \quad \frac{1 \cdot \left(-\frac{1}{r} \right) - 0 + 1}{1 \cdot \left(-\frac{1}{r} \right) - (-1)} = \frac{r}{0} = -\infty$ $\frac{-r}{x^2} < -1$	۴
$x > \frac{1}{r} \rightarrow \frac{\sin r}{\left[r^2 \right] + \cos r} = \frac{1}{1-1} = \frac{1}{0^+} = +\infty$	۵

$$x = -1 \rightarrow \frac{\sqrt{1} - \sqrt{1}}{1 - \sqrt{1}} = \frac{0}{0} \xrightarrow{\text{Hop}} \frac{\frac{r}{r\sqrt{r+1}} - \frac{r}{r\sqrt{r+1}}}{\frac{1}{r\sqrt{r+1}}} = \frac{1 - \frac{r}{r}}{\frac{1}{r}} = \frac{-\frac{r}{r}}{\frac{1}{r}} = \frac{-1}{1} = -1$$

6

$$x = 1 \rightarrow \frac{r - v + d}{r - r} = \frac{0}{0} \xrightarrow{\text{Hop}} \frac{r - \frac{v}{r\sqrt{r}}}{r - \frac{r}{r\sqrt{r+1}}} = \frac{r - \frac{v}{r\sqrt{r}}}{r - \frac{r}{r}} = \frac{r - \frac{v}{r\sqrt{r}}}{\frac{d}{r}} = \frac{-\frac{v}{r\sqrt{r}}}{\frac{d}{r}} = \frac{-\frac{v}{r\sqrt{r}} \cdot r}{d} = \frac{-v}{d}$$

7

$$x = 0 \rightarrow \frac{a + \sqrt{c}}{0} = \frac{0}{0} \Rightarrow \xrightarrow{\text{Hop}} \frac{b}{r\sqrt{b(a)+c}} = \frac{1}{r} \Rightarrow rb = \sqrt{c}$$

$$\frac{ab}{c} = \frac{-\sqrt{c} \left(\frac{\sqrt{c}}{r} \right)}{c} = \frac{-1}{r}$$

8

$$\sin x \begin{cases} \xrightarrow{+} \\ \xrightarrow{-} \end{cases} \rightarrow \frac{f + (r)(k)}{0} = +\infty \Rightarrow f = r(k) > 0 \rightarrow r > k$$

$$\rightarrow \frac{f + (-r)(k)}{0} = +\infty \Rightarrow f = -r(k) < 0 \rightarrow r < k$$

$$r < -k \leq -\frac{r}{r} \rightarrow [-k] = -r$$

9

$$x = a \rightarrow \frac{rb - rb}{ra - b} = \frac{0}{0} \xrightarrow{\text{Hop}} \frac{ra - b = 0 \rightarrow b = ra}{b \times \frac{1}{r\sqrt{r+1}}} \rightarrow \frac{ra \times \frac{1}{r}}{\frac{1}{r}} = \frac{1}{r}$$

10