

$$() = --- ()$$

$$()$$

$$+ + (-)$$

$$> () \quad () = - \quad < ()$$

$$() = - (-)$$

$$() = - () \quad (+\infty)$$

$$() = () = - + + (-)$$

$$(-) + + \frac{+ +}{-}$$

$$() = \frac{+ +}{-} \in (+\infty)$$

$$'() = \frac{(+ +) - (+ +)}{-} = \frac{- + (-) - +}{-} = \frac{(- + -)(-)}{-}$$

$$> --- <$$

$$< --- < < '() > () ()$$

$$> '() < () (+\infty)$$

$$() = () = \frac{+}{-} \quad () \quad () \quad () =$$

$$\frac{+}{-} \quad - \quad < \quad -$$

$$> < --- < < < --- '() < () \left[\begin{matrix} - \\ - \end{matrix} \right]$$

$$--- < < '() > () \left[\begin{matrix} - \\ - \end{matrix} \right] \quad '() < ()$$

$$(+\infty) \quad () = \frac{+}{-}$$

$$\left[\begin{matrix} - \\ - \end{matrix} \right]$$

$$\frac{+ +}{-} \quad - \quad =$$

$$\frac{1}{x} < \frac{1}{y}$$

$$< \frac{1}{x}$$

$$f(x) = \frac{1}{x^2} \in (-\infty, +\infty)$$

$$f'(x) = \frac{-(x^2)^{-1} - (-2x^{-3})}{(x^2)^2} = \frac{-x^{-2} + 2x^{-3}}{x^4} = \frac{-x + 2}{x^6}$$

$$\begin{matrix} < & \frac{1}{x} & > & & - & + & - & < \\ < & < & & ' & > & & > & & ' & < \\ & & (&) & & & (& +\infty) & & & \end{matrix}$$

$$f(x) = f'(x) = \frac{1}{x^2} \quad \frac{1}{x^2} -$$

$$\left[\frac{1}{x^2} \right]$$

$$< \frac{1}{x} \quad < \frac{1}{x}$$

$$\frac{1}{x^2} + \frac{1}{x^2} + \frac{1}{x^2} -$$

$$f(x) = \frac{1}{x^2} + \frac{1}{x^2} -$$

$$f'(x) = \frac{(-2x^{-3}) + (-2x^{-3})}{(x^2)^2} = \frac{-4x^{-3}}{x^4} = \frac{-4}{x^7}$$

$$\begin{matrix} < & \frac{1}{x} & & +(-) & + \\ & f'(x) & & f'(x) & \end{matrix}$$

$$f(x) f'(x) \in (-\infty, +\infty)$$

$$f(x) = f'(x) \quad \left[\frac{1}{x^2} \right]$$

$$< \frac{1}{x} \quad < \frac{1}{x}$$

$$< \frac{1}{x} \quad \frac{1}{x^2} + \frac{1}{x^2} \quad \frac{1}{x^2} + \frac{1}{x^2} -$$

$$f(x) = \frac{1}{x^2} + \frac{1}{x^2} \in (-\infty, +\infty)$$

$$f'(x) = \frac{-(-2x^{-3}) + (-2x^{-3})}{(x^2)^2} = \frac{-(-2x^{-3}) - (-2x^{-3})}{x^4} = \frac{2x^{-3} - 2x^{-3}}{x^4} = 0$$

$$\begin{matrix} < & < & & f'(x) & > & & f'(x) & < \\ & (&) & & & & (& +\infty) & \end{matrix}$$

$$f(x) f'(x) \in (-\infty, +\infty)$$

$$\begin{aligned}
& \frac{(+)}{+} = \frac{(+)}{+} = \frac{(+)}{+} \\
& \frac{(+)}{+} < \frac{(+)}{+} - \\
& \quad \left[\frac{-}{-} \right] \\
& \quad + \quad +(-) \quad - \quad - < \\
& \quad \frac{+(-)}{-} \\
& \quad \quad \quad = \\
& \quad \frac{+(-)}{-} \quad \frac{(-)+(-)}{-} = \frac{-}{+} = \\
& (-) = \frac{-}{+} \in (-\infty) \quad '(-) = \frac{(-)[(-)]}{(+)} \\
& (-) = (-) \\
& '(-) = \quad \quad \quad (-) \quad (-\infty) \quad \quad \quad (-) > (-) = \\
& \quad < < \quad '(-) < \quad > \quad '(-) > \\
& (-) \quad (-) \quad \quad \quad (-\infty) \quad \quad \quad (-) = (-) \frac{-}{-} \\
& = \quad = \frac{+(-)}{-} \quad \frac{-}{-} \\
& \quad \quad \quad \left[\frac{-}{-} \right] \\
& \quad \quad \quad \frac{+(-)}{-} \\
& \quad \quad \quad = \\
& (-) = \frac{+(-)}{+} (-) \\
& '(-) = \frac{(-) \left\{ \left[(-) + + \right] + + \right\}}{(+)} \\
& \quad \quad \quad - \quad \frac{-}{-} \quad - \quad (-) \quad \frac{(-)}{-} \\
& (-) \quad +-- \quad \frac{-(-)}{+} \quad '(-) \quad (-) \quad (-) \\
& \quad \quad \quad - \quad (-) \quad (-)(-) = - + - \\
& (-) \quad +-- \quad +-- \quad '(-) \quad (-) \quad (-\infty) \\
& (-) \quad (-) = \frac{-}{-} \quad \frac{-}{-}
\end{aligned}$$

$$\frac{\begin{bmatrix} - \\ - \end{bmatrix}}{+(-)}$$

$$() = \frac{(-)-}{+}$$

$$- \quad + \quad + \quad - \quad + \quad + \quad - \quad (-)$$

$$- \quad + \frac{(-)}{+} (-) \quad + (-) (-)$$

$$() = \frac{(-)-}{+} \quad \frac{-}{+} \quad \frac{+(-)-}{+} = \frac{-}{+} + \frac{(-)(-)}{(+)} \quad \frac{-}{+}$$

$$= \quad \quad \quad () = \frac{-}{+} \quad \quad \quad [\quad \quad \quad]$$

$$\begin{bmatrix} - \\ - \end{bmatrix}$$

=

—

— + >

$$+ \quad +(-) \quad + \quad - \quad (+) + (-)$$

$$() = + \quad - \quad (+) + (-) \quad \in (+\infty)$$

$$'() = \left(\begin{matrix} + & - & - & - \\ + & - & - & - \end{matrix} \right) + (-) +$$

$$\varphi() = \left(\begin{matrix} + & - & - & - \\ + & - & - & - \end{matrix} \right) + (-) + \quad \quad \quad \varphi'() = \left(\begin{matrix} + & - & - & - & - & - & - \\ + & - & - & - & - & - & - \end{matrix} \right) + -$$

> IPV

$$(\quad) + \quad + (\quad - \quad)$$