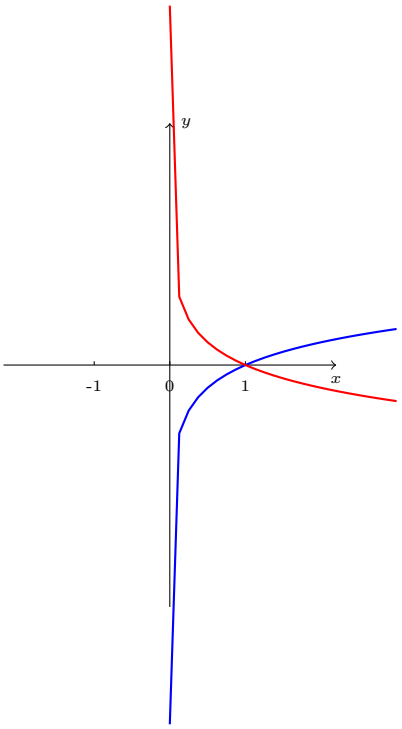
Problem 1

Logarithmic function : f(x) = $\log_a X$



BLUE LINE : f(x) = $\log_{10} X$ $REDLINE$: $f(x) = \log_{0.5}$

DOMAIN: a:(0,1)∪(1, +∞) $X : (0, +\infty)$

CO-DOMAIN: R

CHARACTERISTICS:

Fixed point: Function image is always over fixed point (1,0).
Monotonicity: when a>1, it is a monotonic increasing function in the domain of definition.

Parity: Non-odd and Non-even Functions

Periodicity: not a periodic function

Symmetry: None

Null point: X=1