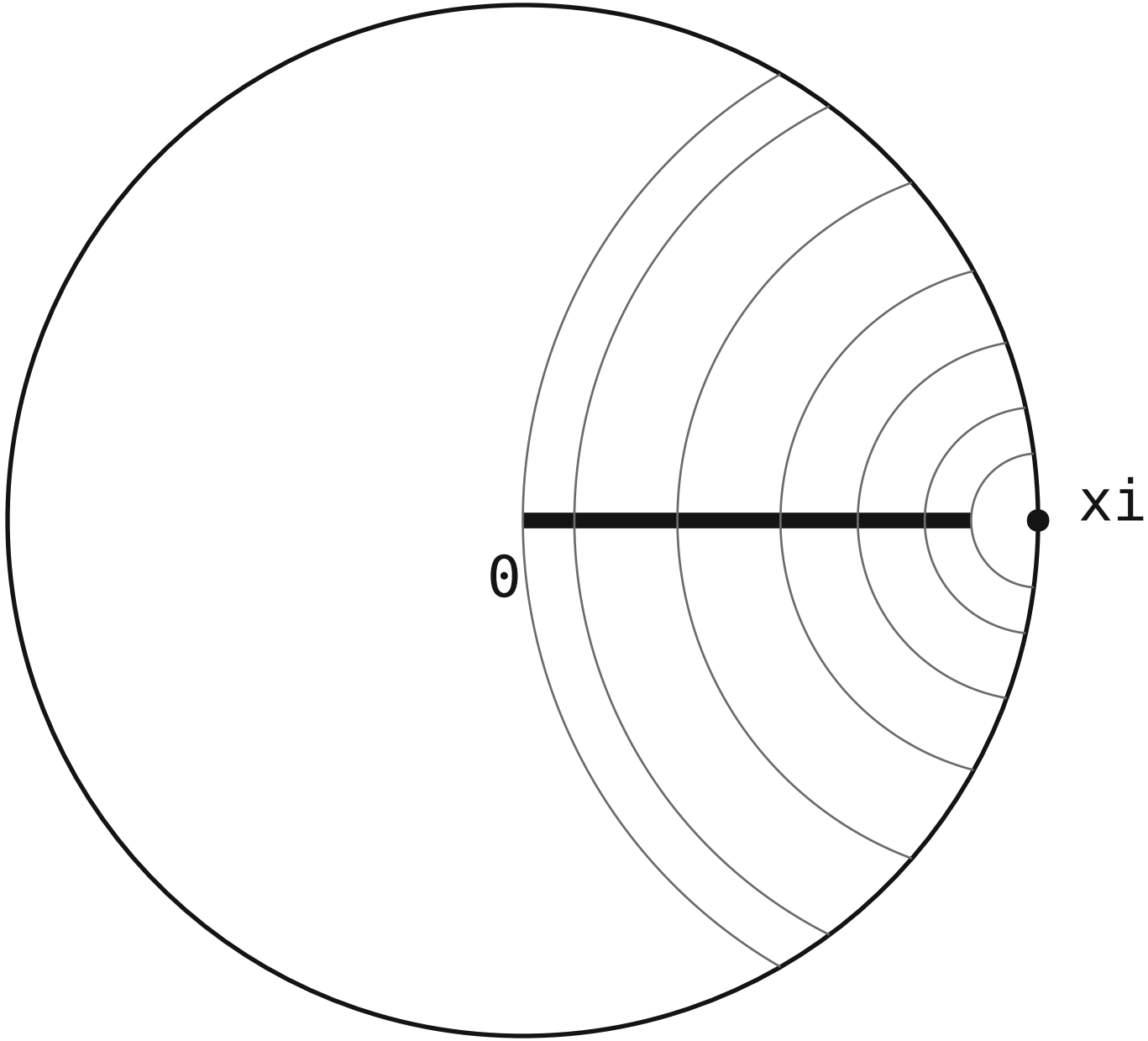


arc length <= pi*t

energy >= 4/(pi*t)

Cap >= (4/pi)
log(1/(1-r))

mod * Cap = 1