

K(1/hours) 0.1
 Cl(L/hr) 4
 Vd(L) 40
 Infusion Period(Hours) 2
 Dose(mg) 1000
 Dosage Interval(Hours) 12
 Accumulation Factor $1 - \exp(-K\tau)$ 0.698806
 Fraction of Steady State Achieved During Infusion $(1 - \exp(-KT))$ 0.181269
 Time Into Infusion 0 1 2
 Time after Infusion
 Time 0 1 2 3 4 5 6 7 8 9 10
 Cp after 1 dose 0 11.89532 22.65866 20.5024 18.55134 16.78595 15.18855 13.74317 12.43533 11.25196 10.18119 9.212322 8.335654
 $C_{p\text{maximumsteadyState}} = S * F * \text{Dose} * (1 - \exp(-KT)) / (Cl * T * (1 - \exp(-K * \text{Tau})))$ 11.92843 **17.02236** **32.42483** 29.3392 26.5472 24.0209 21.73501 19.66665 17.79512 16.10169 14.56941 13.18295 11.92843
 $C_{p\text{minsteadystate}} = C_{\text{maxss}} * \exp(-K * (\text{Tau} - T))$ **11.92843**

Steady State Concentrations for Intermittent Infusions

1st dose level / acculation factor

17.02236 32.42483 29.3392 26.5472 24.0209 21.73501 19.66665 17.79512 16.10169 14.56941 13.18295 11.92843

