C.R.I. Calculations –

Quantity of drug (mg) = [Infusion rate of drug (mg/kg/hour)/Fluid infusion rate (ml/kg/hour)] \* diluent volume ml)

Surgical fluid infusion rate = 5 ml/kg/hour, Diluent volume = 1000 ml

Calf –

Xylazine infusion rate = 0.05 mg/kg/hour, Concentration = 20 mg/ml

Quantity of Xylazine = (0.05 mg/kg/hour / 5ml/kg/hour) \* 1000 ml = 10 mg

Volume of Xylazine = 10 mg / 20 mg/ml = 0.5 ml

Ketamine infusion rate = 5 mg/kg/hour, Concentration = 100 mg/ml

Quantity of Ketamine = (5 mg/kg/hour / 5 ml/kg/hour) \* 1000 ml = 1000 mg

Volume of Ketamine = 1000 mg / 100 mg/ml = 10 ml

Lidocaine infusion rate = 1 mg/kg/hour, Concentration = 20 mg/ml

Quantity of Lidocaine = (1 mg/kg/hour / 5 ml/kg/hour) \* 1000 ml = 200 mg

Volume of Lidocaine = 200 mg / 20 mg/ml = 10 ml

Drip Rate (drops/sec) = [Weight (kg) \* Fluid infusion rate (ml/kg/hour) \* Drip factor (drops/ml)] / 3600 sec/hour

= [103 kg \* 5 ml/kg/hour \* 20 drops/ml] / 3600 sec/hour = 2.8 drops/sec ~ 3 drops/sec

Pigs (Sample) –

Xylazine infusion rate = 1 mg/kg/hour, Concentration = 20 mg/ml

Quantity of Xylazine = (1 mg/kg/hour / 5ml/kg/hour) \* 1000 ml = 200 mg

Volume of Xylazine = 200 mg / 20 mg/ml = 10 ml

Ketamine infusion rate = 5 mg/kg/hour, Concentration = 100 mg/ml

Quantity of Ketamine = (5 mg/kg/hour / 5 ml/kg/hour) \* 1000 ml = 1000 mg

Volume of Ketamine = 1000 mg / 100 mg/ml = 10 ml

Lidocaine infusion rate = 1 mg/kg/hour, Concentration = 20 mg/ml

Quantity of Lidocaine = (1 mg/kg/hour / 5 ml/kg/hour) \* 1000 ml = 200 mg

Volume of Lidocaine = 200 mg / 20 mg/ml = 10 ml

Drip Rate (drops/sec) = [Weight (kg) \* Fluid infusion rate (ml/kg/hour) \* Drip factor (drops/ml)] / 3600 sec/hour

= [70.5 kg \* 5 ml/kg/hour \* 20 drops/ml] / 3600 sec/hour = 1.9 drops/sec ~ 2 drops/sec