

## DO THE MATH (Keep It Simple, Sweetie)

$$\text{Count/mm}^3 = \frac{(\# \text{ of cells counted}) \times (\text{dilution factor})}{(\# \text{ of squares counted}) \times (\text{Volume mm}^3)}$$

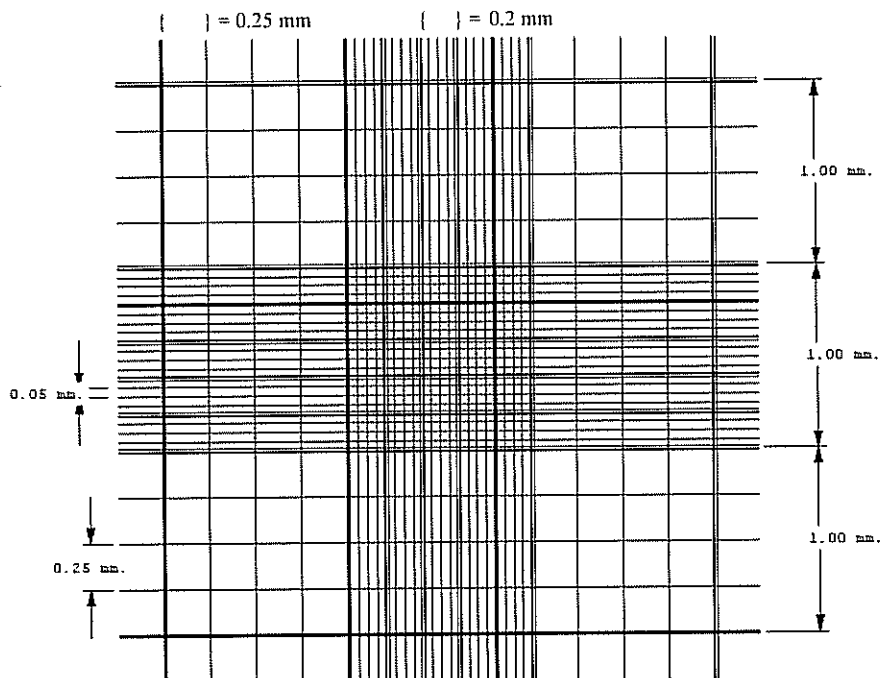
Volume = Area x Depth

Area = Height x Width of squares counted

Depth = 0.1 mm

$$\text{Acceptable} = \frac{(\# \text{ of cells counted}) \times (\text{dilution factor})}{(\# \text{ of squares counted}) \times \text{Area} \times (\text{Depth } 0.1 \text{ mm})}$$

$$\text{Or} = \frac{(\# \text{ of cells counted}) \times (\text{dilution factor}) \times (\text{Depth } 10)}{(\# \text{ of squares counted}) \times \text{Area}}$$



NO

$$R = \frac{88+94}{2} = \frac{91 \times 1000}{(4/16) \times 1 \times 0.1} = 3640,000$$

$$R = \frac{42+44}{2/5 \times 0.1} = 2150$$

$$R = \frac{75+76}{(1/25) \times 0.1 \times 2} = 18,875$$

$$R = \frac{(101+118) \times 20}{(5/25) \times 0.1 \times 2} = 109,500$$

YES

$$W = \frac{204+205}{(18) \times 1 \times 1 \times 0.1} = 227$$

$$W = \frac{(21+19) \times 50}{(10) \times 1 \times 1 \times 0.1} = 2000$$

$$W = \frac{141}{18 \times 1 \times 1 \times 0.1} = 1$$

$$R = \frac{100+102}{0.4 \times 0.1} = 5200$$