

## BASIC MATHEMATICS CONVERSION TABLE

$$\pi (\text{pi}) = 3.14$$

$$1 \text{ cu. ft.} = 7.48 \text{ gallons}$$

$$1 \text{ gallon water} = 8.34 \text{ lbs.}$$

$$1 \text{ gallon} = 231 \text{ cu. in.}$$

$$8.34 \text{ lbs.} = \text{one part per million by weight of one million gallons of water}$$

$$1 \text{ psi} = 2.31 \text{ ft.}$$

$$1 \text{ mi} = 5,280 \text{ ft.}$$

Diameter = The distance across a circle through its center

Radius = The distance from the center of a circle to the edge ( $\frac{1}{2}$  the diameter)

MG = Million gallons

one day = 1440 minutes

$$1 \text{ grain per gallon (gpg)} = 17.1 \text{ mg/l}$$

### FORMULAE

$$\text{Area of a circle} = \pi r^2$$

$$\text{Volume of a rectangle} = \text{Length} \times \text{Width} \times \text{Height}$$

$$\text{Volume of a cylinder} = \pi r^2 \times \text{Height}$$

$$\text{Volume of a pipe} = \pi r^2 \times \text{Length}$$

$$\text{Volume of a rectangular tank} = \text{Length} \times \text{Width} \times \text{Height}$$

$$(\text{MG}) (\text{mg/l}) (8.34) = \text{lbs}$$

$$\text{lbs of compound} = \text{lbs pure chlorine divided by \% chlorine}$$

$$\text{Dosage in mg/l} = \frac{\text{lbs of chemical}}$$

$$\text{MGD} \times 8.34$$

$$\text{Dosage} = \text{Demand} + \text{Residual}$$