

A) Calculations: 1. Area = (L X W) 2. Volume = Area X avg depth x 7.5 gal/cu ft (rounded up constant) 3. Flow rate = Volume/the required turnover rate = gpm (the min required flow rate see rules 04B6f and 05.1(F))(12) 4. Filter Max Flow = sq ft (filter area) X gpm/sq ft (N5F filtration rate) = gpm 5. Total Dynamic Head (TDH): the resistance to flow within the pipes-fittings, the filter, and the heater to move water; the typical pool is approx = 50 ft TDH. 6. Pump size: based on the pump curve, according to the following: a) Min. required flow rate b) Max. allowable flow c) If pump output exceeds a), but does not exceed b); the pump is properly sized with the filter. *NOTE- a throttle valve must be installed if the max. allowable filter flow-b) is exceeded, to restrict pump capacity. A throttle valve may also be used to restrict flow to suction drains or other system components.		
B) Water Chemistry: to adjust water quality ALWAYS add CHEMICALS SLOWLY to WATER in a pail; mix dilution, disperse into pool slowly when the pool is closed; test. To Hypochlorinate (Whenever the combined chlorine value is over approx. 0.4 ppm): the amount of free chlorine to neutralize the combined = (4) X 10 or 4.0 ppm (free chlorine) To raise Chlorine (1 ppm/10,000 gal of pool water): add 2 oz Calcium Hypochlorite (65%); add 10.7 fl oz Sodium Hypochlorite (12%) To neutralize excess chlorine (1 ppm/10,000 gal of pool water): add 1 oz Sodium Thiosulfate-carefully, or more chlorine will be required to off set the extra neutralizer To LOWER Cyanuric Acid, Total Dissolved Solids (TDS), or Calcium Hardness: drain a portion or all of the pool. To RAISE pH (.2 units/10,000 gal of pool water- based upon BAST demand test/ Alkalinity): add 6 oz of Sodium Carbonate (Soda Ash) To LOWER pH (.2 units/10,000 gal of pool water, based upon AClD demand test/ Alkalinity): add 12 oz Muriatic acid or 1.0 lb. Sodium Bisulfate (dry acid) To RAISE Alkalinity (10 ppm/10,000 gal of pool water): add approx. 1.5 lbs. Sodium Bicarbonate (Baking Soda) To LOWER Alkalinity (10 ppm/10,000 gal of pool water): add 26 oz Muriatic acid or 2.15 lbs. Sodium Bisulfate (dry acid) To RAISE Calcium Hardness (10 ppm/10,000 gal of pool water, based upon Calcium Hardness test): add .9 lbs Calcium Chloride Dihydrate (100%) Source: National Swimming Pool Foundation		
Fecal/ Blood/ Vomitus Accident Report If necessary, attach additional remarks and information		
Date	Time	Description of event
Corrective measures		
Record contact information on a separate page for ALL patrons involved		
Injury Accident Report If necessary, attach additional remarks and information		
Date	Time	Victim's age [] <input type="checkbox"/> Male <input type="checkbox"/> Female
Victim(s) name/Contact information		
Description of accident-injuries		
First aid administered		
Comments		