Pool Calculation Formulas

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Public Health
Prevent. Promote. Protect.
Hendricks County Health Department

Surface Areas: (Radius = diameter ÷ 2)

Rectangle/Square — Length X Width = square (sq) feet (ft)

Circle — 3.14 X Radius X Radius = square (sq) feet (ft)

Pool Volume: (Average Depth = (shallow + deep) ÷ 2)

Rectangle — Length X Width X Average Depth X 7.5 = Gallons

Circle — 3.14 X Radius X Radius X Average Depth X 7.5 = Gallons

Turnover Rate:

Pool Volume ÷ Flow Rate ÷ 60 = Hours

Flow Rate:

Pool Volume ÷ Turnover Rate ÷ 60 = Gallons/Minute (gpm)

Filter Surface Area:

Flow Rate ÷ Filtering Rate = square (sq) feet (ft)

Basic conversion

3 ft(feet)= 1 yard

3.28 ft(feet)= 1 Meter