

Rectangular Pool: Capacity in gallons is equal to the length times the width times the average depth (in feet) times 7.5

$L \times W \times D \times 7.5 = \text{gallons of water in pool}$

Round Pool: Capacity in gallons is equal to Pi (3.14) times the radius squared time the depth (in feet) times 7.5

$3.14 \times r^2 \times D \times 7.5 = \text{gallons of water in pool}$

Oval pool: Capacity in gallons is equal to length times width times average depth (in feet) times 7.5

$L \times W \times D \times 7.5 = \text{gallons of water in pool}$