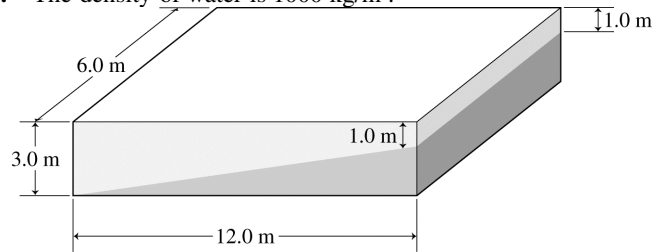**15.3.** **Model:** The density of water is 1000 kg/m³.

Visualize:

Solve: Volume of water in the swimming pool is

$$V = 6 \text{ m} \times 12 \text{ m} \times 3 \text{ m} - \tfrac{1}{2}(6 \text{ m} \times 12 \text{ m} \times 2 \text{ m}) = 144 \text{ m}^3$$

The mass of water in the swimming pool is

$$m = \rho V = \left(1000 \text{ kg/m}^3\right)\left(144 \text{ m}^3\right) = 1.44 \times 10^5 \text{ kg}$$