

### **Answer on Question #75861, Chemistry / General Chemistry**

Calculate the mass of the solute in 750.0 mL of  $\text{CaCl}_2$  solution which is 0.500 M

#### **Solution**

Find the amount of  $\text{CaCl}_2$  in the solution:

$$v = C \times V = 0.5 \times 0.75 = 0.375 \text{ (mol)}$$

Find the mass of  $\text{CaCl}_2$  ( $M = 111 \text{ g/mole}$ )

$$m = 0.375 \times 111 = \mathbf{41.63 \text{ (g)}}$$

#### **Answer**

The mass of  $\text{CaCl}_2$  in the solution is **41.63 g**.