# MIXED MOLE PROBLEMS

Name _____

Solve the following problems.

1. How many grams are there in $1.5 \times 10^{25}$ molecules of $CO_2$?

   _____

2. What volume would the $CO_2$ in Problem 1 occupy at STP?

   _____

3. A sample of $NH_3$ gas occupies 75.0 liters at STP. How many molecules is this?

   _____

4. What is the mass of the sample of $NH_3$ in Problem 3?

   _____

5. How many atoms are there in $1.3 \times 10^{22}$ molecules of $NO_2$?

   _____

6. A 5.0 g sample of $O_2$ is in a container at STP. What volume is the container?

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7. How many molecules of $O_2$ are in the container in Problem 6? How many atoms of oxygen?

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