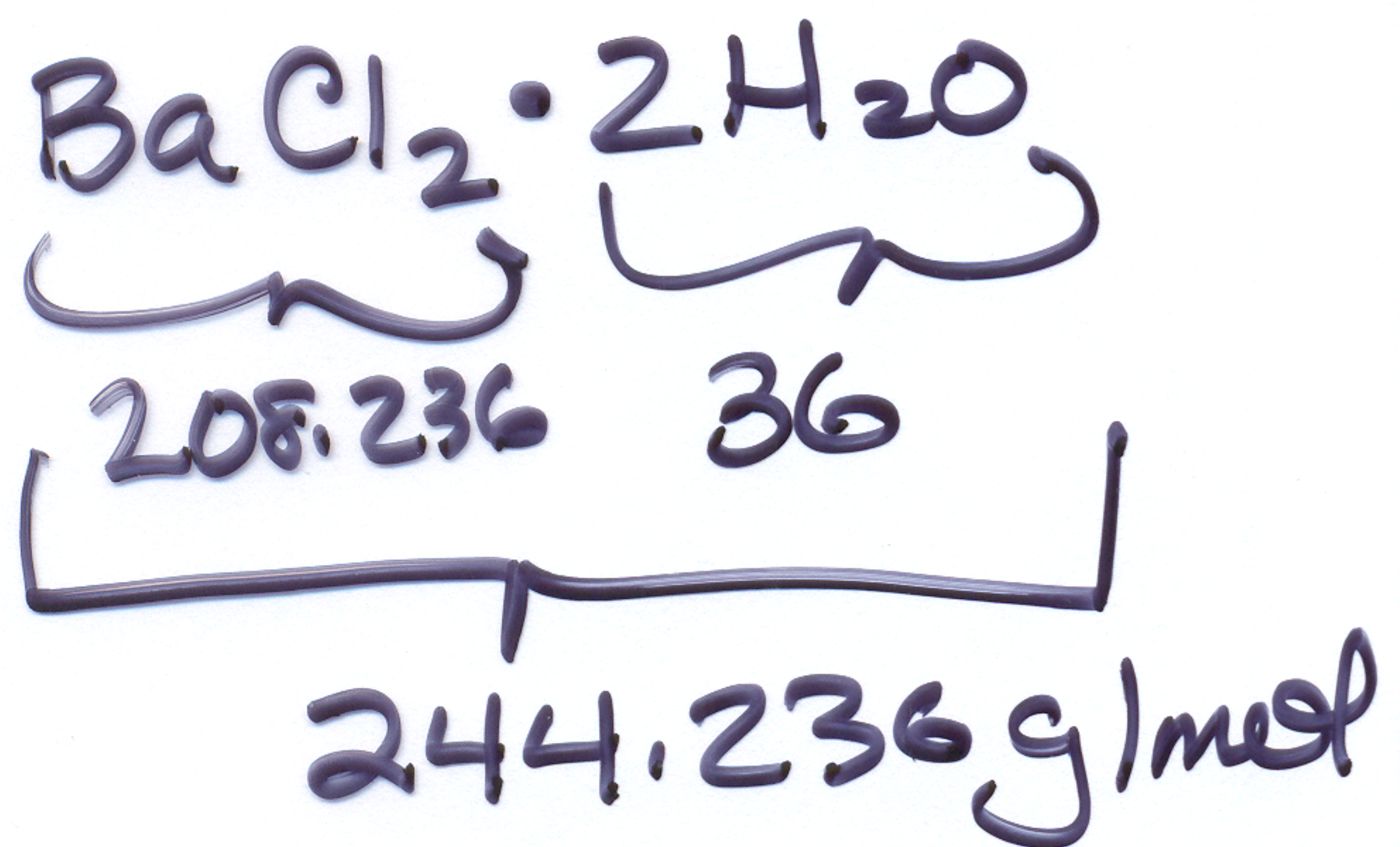


2.104g sample $\text{BaCl}_2 + \text{BaCl}_2 \cdot 2\text{H}_2\text{O}$ 9/21/09, p. 1
- 1.953g = final mass

0.151g H_2O

$$0.151\text{g H}_2\text{O} \times \frac{\text{mol}}{18\text{g}} = 0.00839\text{ mol H}_2\text{O}$$

$$0.00839\text{ mol H}_2\text{O} \times \frac{1\text{ mol BaCl}_2 \cdot 2\text{H}_2\text{O}}{2\text{ mol H}_2\text{O}} = 0.0042\text{ mol BaCl}_2 \cdot 2\text{H}_2\text{O}$$



$$0.0042\text{ mol BaCl}_2 \cdot 2\text{H}_2\text{O} \times \frac{244.236\text{g}}{\text{mol}} = 1.03\text{g}$$

$$\% \text{ BaCl}_2 \cdot 2\text{H}_2\text{O} = \frac{1.03\text{g BaCl}_2 \cdot 2\text{H}_2\text{O}}{2.104\text{g (Orig. Sample mix)}} \times 100\% = 48.8\%$$

$\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$

51% BaCl_2