Weeks 1-2 Worksheet

Topics Covered:
- Drawing resonance structures
- Assigning formal charges
- Drawing Lewis structures

1. Draw 3 more resonance structures for the following cation.

\[
\begin{align*}
\text{Cation} & \\
\end{align*}
\]

2. Draw all reasonable resonance structures for the following:
   a. \( \text{O}_3 \)
   b. \( \text{NO}_3^- \)
3. Assign formal charges to the following O and N in the given molecules. All lone pairs have been drawn.

\[ \text{N} \equiv \text{N} : \]

a.

\[ \cdot \cdot \cdot \]

b.

4. Draw the Lewis structure for each molecular formula.

a. \((\text{CH}_3)_2\text{CHNO}_2\)

b. \((\text{CH}_3\text{CO})_2\text{O}\)