1. (9) Give either the **IUPAC name** or the **correct structure** for each of the following compounds:

8-ethyl-1-methylbicyclo[4.3.0]nonane

2. (4) Which of the following Newman projections represents 2,4-dimethylpentane?

3. (2) Which of the following Newman projections represents the **gauche** conformation of butane?

3. (3) Finish a three dimensional drawing of the **most stable** chair conformation of **methylcyclohexane**:

4. (4) Circle the conformation that has the **largest diaxial** interactions:

5. (3) Circle the compound that has a **triple bond** in the parent chain:

2-pentylnal propanone butylecyclohexane propenal ethanol 3-hexenol butanoic acid