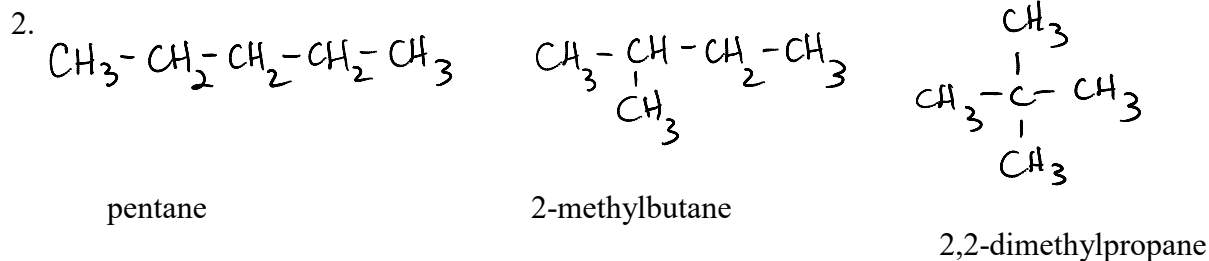


Answers to Chapters 20 Study Questions

1. a) alkene, unsaturated d) aromatic, unsaturated g) alkyne, unsaturated
 b) alkane, saturated e) alkane, saturated h) alkene, unsaturated
 c) alkyne, unsaturated f) alkane, saturated i) aromatic, unsaturated



3. a) combustion; $2 \text{C}_4\text{H}_{10} + 13 \text{O}_2 \rightarrow 8 \text{CO}_2 + 10 \text{H}_2\text{O}$
 b) dehydrogenation; $\text{CH}_3-\text{CH}_2-\text{CH}_3 \rightarrow \text{CH}_2=\text{CH}-\text{CH}_3 + \text{H}_2$
 c) substitution; $\text{CH}_4 + \text{F}_2 \rightarrow \text{CH}_3\text{F} + \text{HF}$

4. Label at least 3 functional groups on the following molecule:

