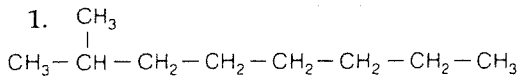
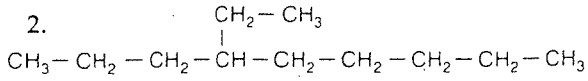
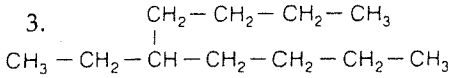
Name _____ Date _____ Class _____

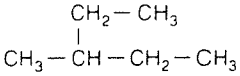
# 25–4 Practice Problems

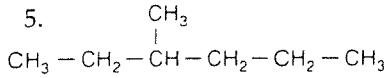
*Give the IUPAC name for the following molecules:*

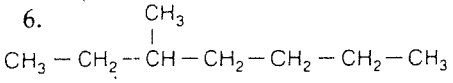
1. 

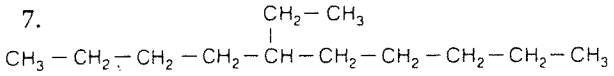
2. 

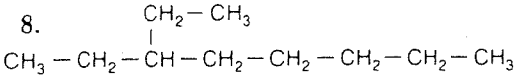
3. 

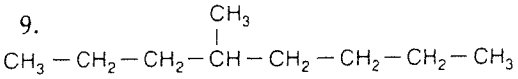
4. 

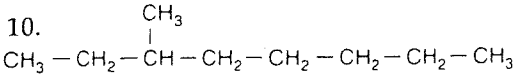
5. 

6. 

7. 

8. 

9. 

10. 

*Write condensed structural formulas for the following:*

11. 4-methyloctane

12. 4-ethyldecane

13. 3-ethylpentane

14. 3-ethylhexane

15. 5-butyldecane

16. 4-ethylheptane

17. 3-methylnonane

18. 2-methylheptane

19. 4-propylheptane

20. 5-butylnonane

Name _____ Date _____ Class _____

## 25–4 *Practice Problems (continued)*

21. Draw the structural formula for the one structural isomer of butane and name it.

22. Draw structural formulas for two structural isomers of octane that have only one branch. Name the isomers.

23. Draw the structural formula for one structural isomer of pentane and name it.

24. The molecule 2-methylheptane is a structural isomer of which straight-chain alkane?

25. The molecule 2-methylbutane is a structural isomer of which straight-chain alkane?

26. The molecule 3-methyloctane is a structural isomer of which straight-chain alkane?

27. The molecule 3-ethylhexane is a structural isomer of which straight-chain alkane?

28. The molecule 3-methylpentane is a structural isomer of which straight-chain alkane?

29. The molecule 3-propylheptane is a structural isomer of which straight-chain alkane?

30. The molecule 3-methylhexane is a structural isomer of which straight-chain alkane?