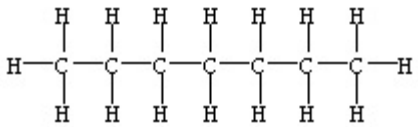
Organic #2 **Alkanes** Name: _____

1. Which of the following are alkanes?

a) C_4H_8 b) C_4H_{10} c) $C_{14}H_{30}$ d) $C_{40}H_{78}$ e) $C_{25}H_{52}$

2. Name the following straight-chain alkanes.

a)

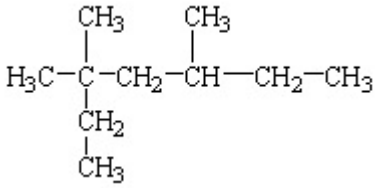


b) $CH_3-(CH_2)_7-CH_3$

c)

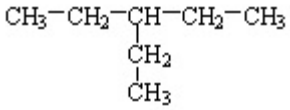
3. Draw structural formulas and give the names for the three isomers of C_5H_{12}.

4. Explain why is the name 2-ethyl-2,4-dimethylhexane unsuitable for this compound AND write the proper name for the compound.



5. Name each of the following:

a)



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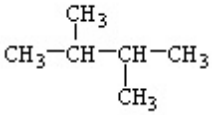
b)



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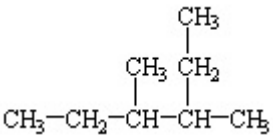
c)



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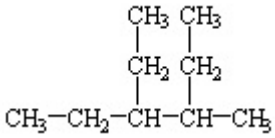
d)



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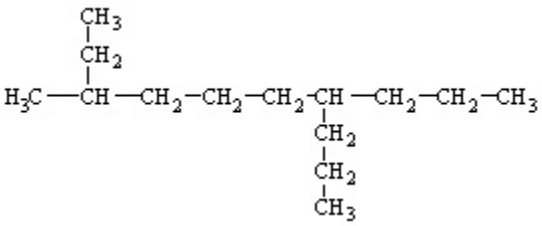
e)



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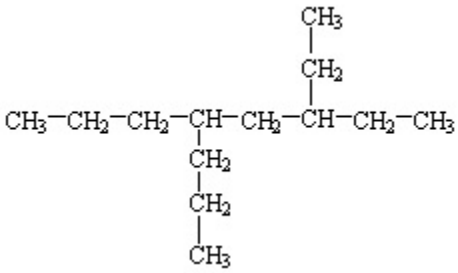

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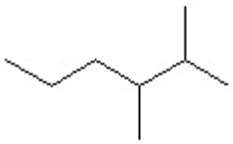
g)



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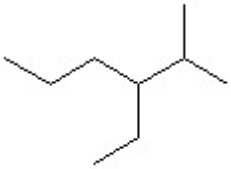
h)



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6. Draw structural formulas for each of the following:

a) 3-ethylhexane

b) 2,4-dimethylheptane

c) 3,4-diethyl-3-methylhexane

d) 3-ethyl-4,5-dipropyloctane