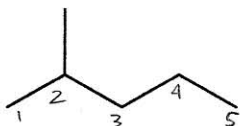


Chapter 02 Worksheet 03

Provide the IUPAC names for the following compounds.

1.



2-methylpentane

pentane
2-methyl

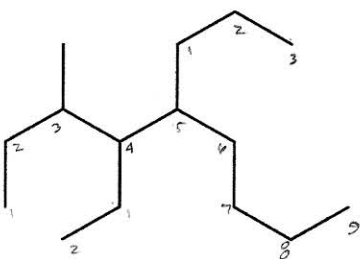
2.



3-methylheptane

heptane
3-methyl

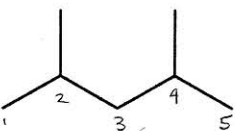
3.



4-ethyl-3-methyl-5-propylnonane

nonane
3-methyl
4-ethyl
5-propyl

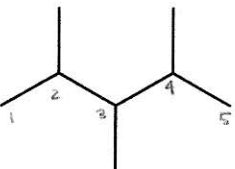
4.



2,4-dimethylpentane

pentane
~~2-methyl~~
~~4-methyl~~
2,4-dimethyl

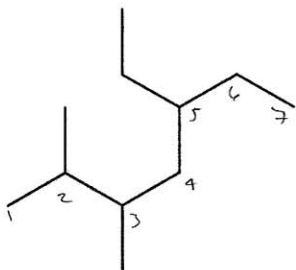
5.



2,3,4-trimethylpentane

pentane
~~2-methyl~~
~~3-methyl~~
~~4-methyl~~ 2,3,4-trimethyl

6.



5-ethyl-2,3-dimethylheptane

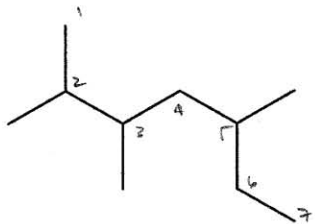
heptane

~~2-methyl~~ 2,3-dimethyl

~~3-methyl~~

5-ethyl

7.



2,3,5-trimethylheptane

heptane

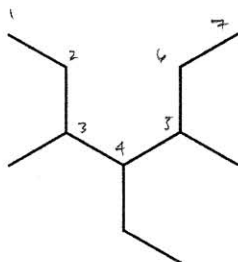
~~2-methyl~~

~~3-methyl~~

~~5-methyl~~

2,3,5-trimethyl

8.



4-ethyl-3,5-dimethylheptane

heptane

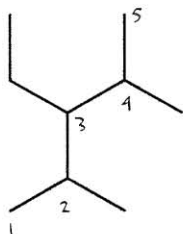
~~3-methyl~~

~~5-methyl~~

~~4-ethyl~~

3,5-dimethyl

9.



3-ethyl-2,4-dimethylpentane

pentane

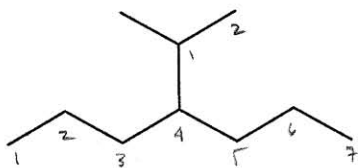
~~2-methyl~~

~~4-methyl~~

~~3-ethyl~~

2,4-dimethyl

10.

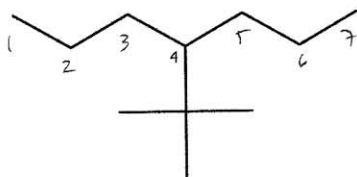


4-(1-methyl)ethylheptane
or... 4-isopropylheptane

heptane

4-ethyl
1-methyl \Rightarrow 4-(1-methyl)ethyl

11.

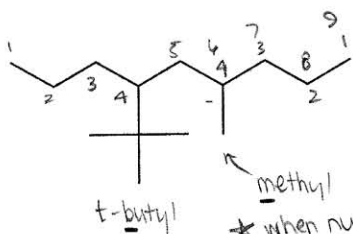


4-tert-butylheptane

heptane

4-tert-butyl

12.



4-tert-butyl-6-methylnonane

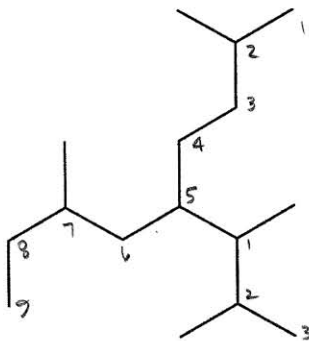
nonane

4-tert-butyl

6-methyl

* When numbering fails, i.e.: 1,2,3,4 from either side, resort to alphabet,
butyl vs methyl

13.



2,7-dimethyl-5-(1,2-dimethyl)propylnonane

nonane

~~2-methyl~~

~~7-methyl~~

2,7-dimethyl

5-propyl

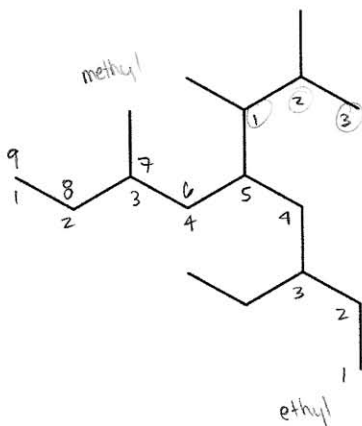
~~1-methyl~~

~~2-methyl~~

1,2-dimethyl

\Rightarrow 5-(1,2-dimethyl)propyl

14.



3-ethyl-7-methyl-5-(1,2-dimethyl)propylnonane

nonane

3-ethyl

7-methyl

5-propyl

~~1-methyl~~

~~2-methyl~~

1,2-dimethyl

\Rightarrow 5-(1,2-dimethyl)propyl