## **Alkanes Homework**

Draw the structures of the following alkanes.

propane

octane

2-methylpentane

3-ethyl-4-propyloctane

3-*t*-butylhexane

5-s-butyldecane

3-isopropylpentane

ethylcyclobutane

4-isobutyl-1-methylcyclohexane

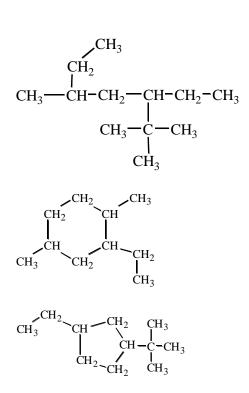
What is the correct systematic name (both current and old) for the following structures?

$$CH_3 - CH_2 - CH_2 - CH_2 - CH_2 - CH_3$$

$$CH_{3} - CH_{2} - CH_{2} - CH_{2} - CH_{2} - CH_{2} - CH_{3}$$

$$CH_{3} - CH_{2} - CH_{2} - CH_{2} - CH_{3}$$

$$CH_{3} - CH_{2} - CH_{3} - C$$



What is wrong with the following name for the associated structure? Fix the problem.

$$CH_{3}$$

$$CH_{3}$$

$$CH_{2}$$

$$CH_{-}CH_{2}$$

$$CH_{-}CH_{3}$$

$$CH_{-}CH_{3}$$

$$CH_{3}$$

2-isopropyl-4-methylpentane