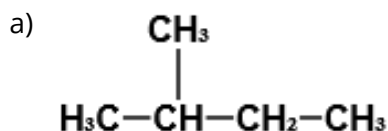


Nomenklatur der Alkane - A

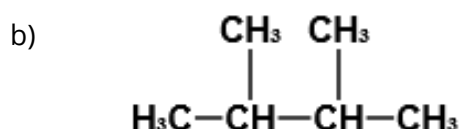
① Zeichne die Halbstrukturformel der folgenden Alkan-Moleküle:

- a) **3-Ethylhexan** (Längste Kette: 6 Kohlenstoff-Atome, Ethyl-Gruppe: $\text{CH}_2\text{-CH}_3$)
- b) **2,3-Dimethylbutan** (2 CH_3 -Gruppen, eine am 2. und eine am 3. Kohlenstoff-Atom)
- c) **2,4-Dimethylpentan** (Längste Kette: 5 Kohlenstoff-Atome, zwei CH_3 -Gruppen)
- d) **4-Ethyl-2-methylheptan** (Ethyl-Gruppe: $\text{CH}_2\text{-CH}_3$)

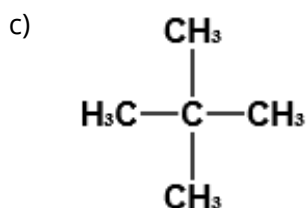
② Benenne die dargestellten Alkan-Moleküle:



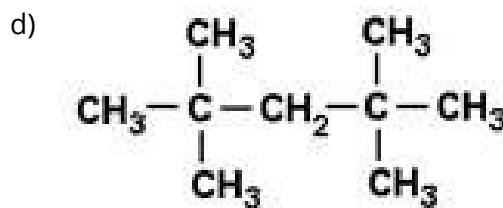
2-_____butan



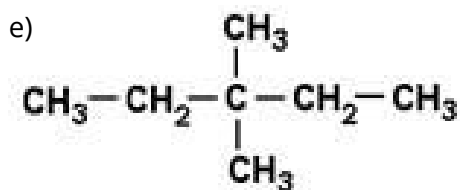
____-Dimethyl_____



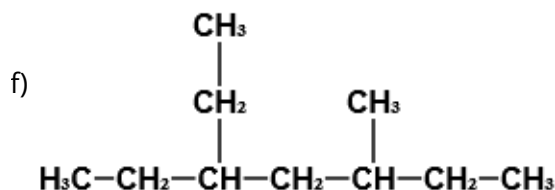
2,2-_____propan



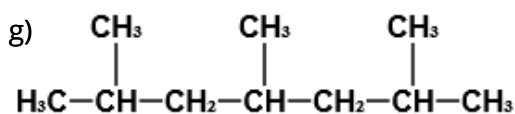
2,2,_____-_____-methyl_____



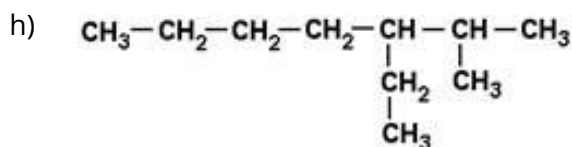
____-Di_____pentan



3-_____-_____-methyl_____



2,_____-_____-methyl_____



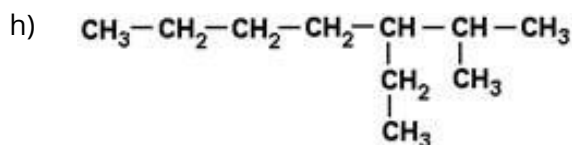
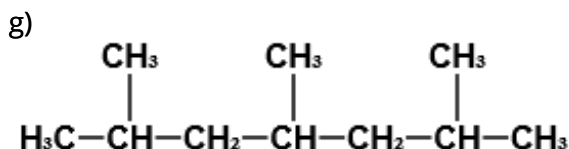
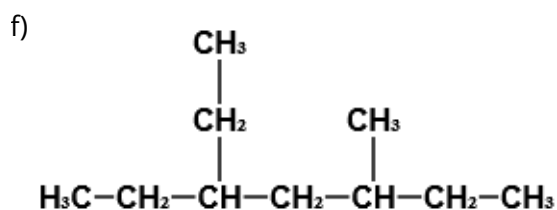
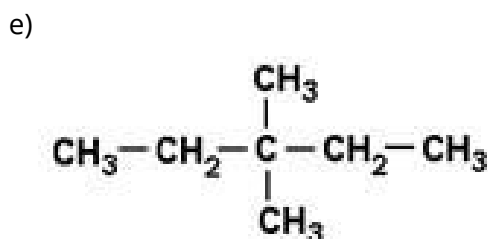
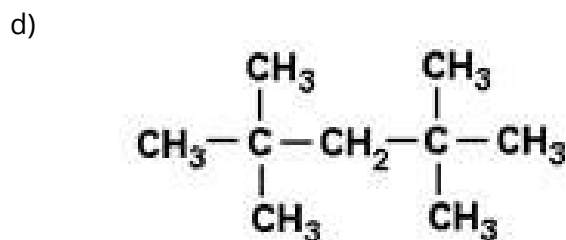
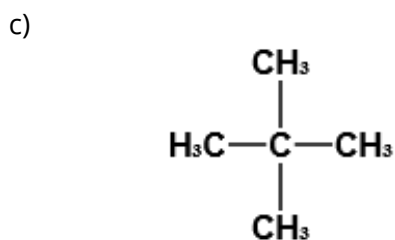
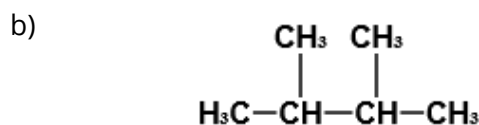
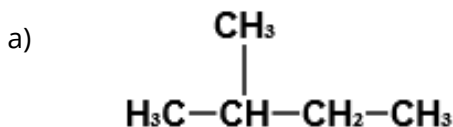
3-_____-2-_____

Nomenklatur der Alkane B

① Zeichne die Halbstrukturformel der folgenden Alkan-Moleküle:

- a) 3-Ethylhexan
- b) 2,3-Dimethylbutan
- c) 2,4-Dimethylpentan
- d) 4-Ethyl-2-methylheptan
- e) 5-Ethyl-3-methyloktan
- f) 3,4,4,5-Tetramethylheptan

② Benenne die dargestellten Alkan-Moleküle:



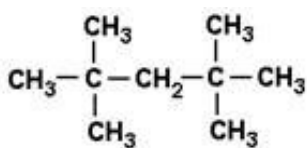
Nomenklatur der Alkane - C

① Zeichne die Halbstrukturformel der folgenden Alkan-Moleküle:

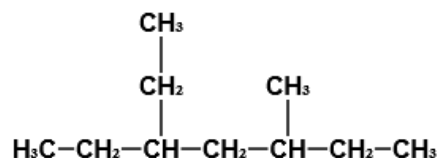
- a) 2,4-Dimethylpentan
- b) 4-Ethyl-2-methylheptan
- c) 2,2,3,3-Tetramethylpentan
- d) 3,4,4,5-Tetramethylheptan
- e) 3-Ethyl-3,4-dimethylheptan

② Benenne die dargestellten Alkan-Moleküle:

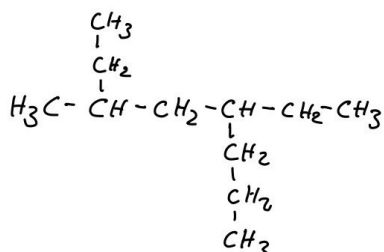
a)



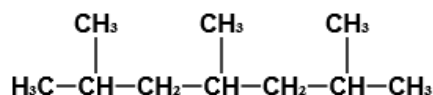
b)



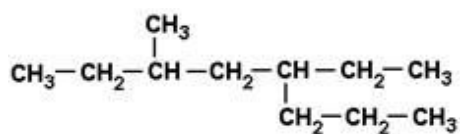
c)



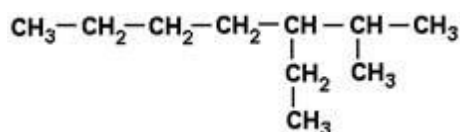
d)



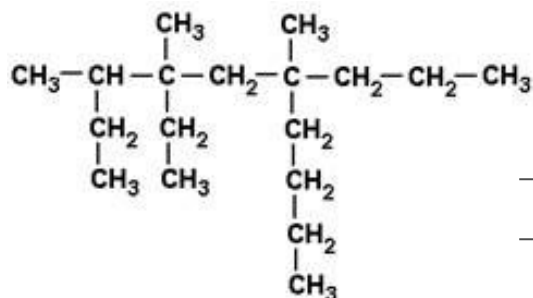
e)



f)



g)



③ Erläutere, welche Länge die Seitenkette am dritten Kohlenstoffatom der Hauptkette maximal haben darf.