

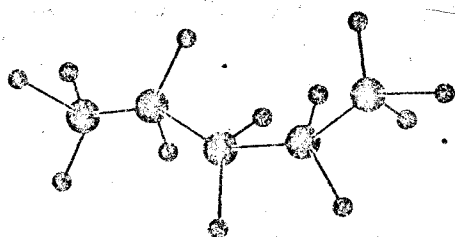
NAMNGIVNING. (NOMENKLATUR) De rationella namnen.

Leta ut den längsta kolkedjan och numrera kolatomerna från molekylens ena ände. (Då mer än en möjlighet finnes, väljer man den numrering som har lägst siffror)

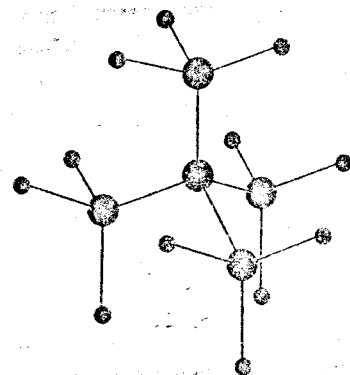
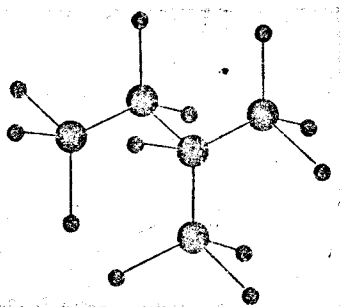
Om funktionell grupp finns i molekylen börjar man numrera kolatomen närmast denna grupp.

Den längsta kolkedjan skall bilda slutändelse i namnet.

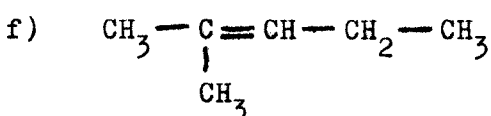
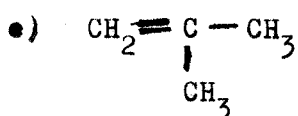
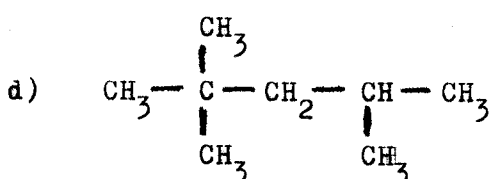
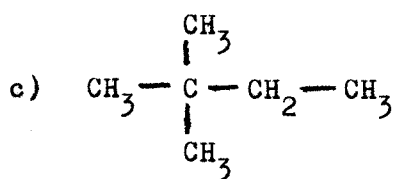
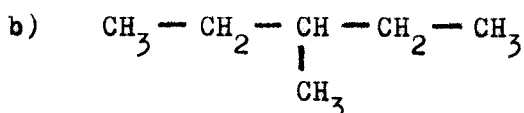
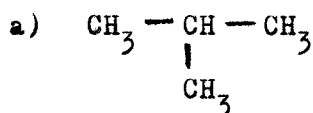
Siffrorna i namnet anger vid vilken kolatom utbyte (substitution) av väteatom(er) mot radikal(er) skett.



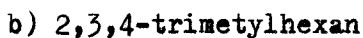
pentan



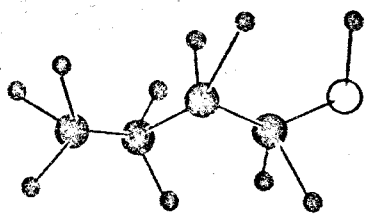
Ge rationella namn åt följande ämnen:



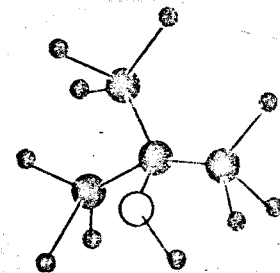
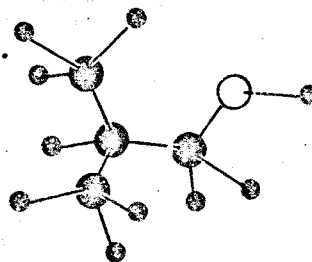
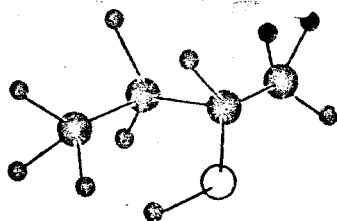
Skriv strukturformler för följande ämnen:



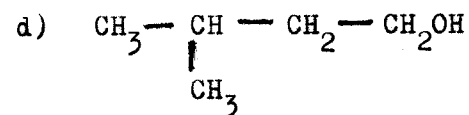
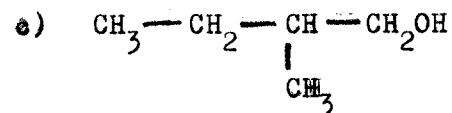
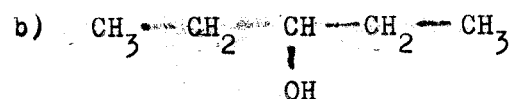
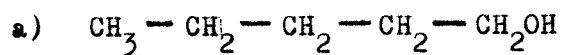
ALKOHLER.



1-butanol
 $\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH}$



Ge rationella namn åt följande alkoholer:



Skriv strukturformler för följande alkoholer:

a) 2-pentanol

b) 2-metyl-2-butanol

c) 3-metyl-2-butanol

d) 2,2-dimetyl-1-propanol

e) 1,2-propandiol

KARBOXYLSYROR

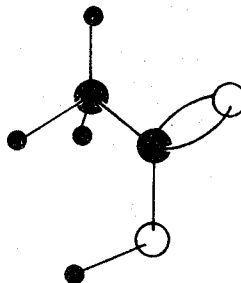
Vid kraftig oxidation av en alkohol bildas en karboxylsyra.

(en karboxylsyra kan tänkas bildad ur ett kolväte genom att en eller flera väteatomer utbyts mot karboxylgrupper, $-\text{COOH}$)

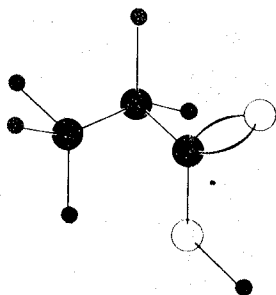
ex



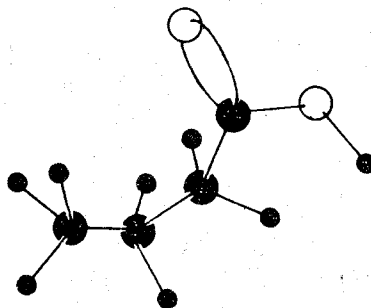
a) HCOOH
metansyra
(myrsyra)
smältpunkt: 8°C
kokpunkt: 101°C



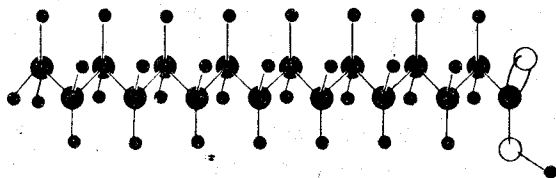
b) CH_3-COOH
etansyra
(ättiksyra)
smältpunkt: 17°C
kokpunkt: 118°C



c) $\text{CH}_3-\text{CH}_2-\text{COOH}$
propansyra
(propionsyra)
smältpunkt: -22°C
kokpunkt: 141°C



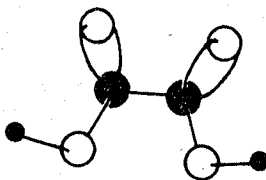
d) $\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{COOH}$
butansyra
(smörsyra)
smältpunkt: -8°C
kokpunkt: 164°C



e) $\text{CH}_3-(\text{CH}_2)_{13}-\text{CH}_2-\text{COOH}$
hexadekansyra
(palmitinsyra)
smältpunkt: 64°C
kokpunkt: 272°C (100 mm)

f) $\text{CH}_3-(\text{CH}_2)_{15}-\text{CH}_2-\text{COOH}$
oktadekansyra
(stearinsyra)
smältpunkt: 71°C
kokpunkt: 291°C (100 mm)

g) $\text{HOOC}-\text{COOH}$
etandisyra
(oxalsyra)
smältpunkt: 189°C
kokpunkt: sublimerar

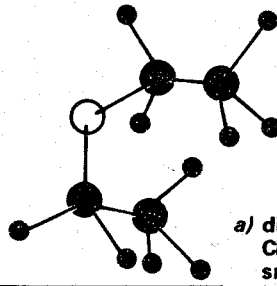


17.2 Ämnen vars summaformel är $C_4H_{10}O$

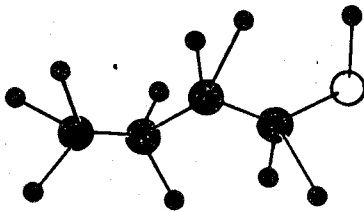
○ syreatom

● kolatom

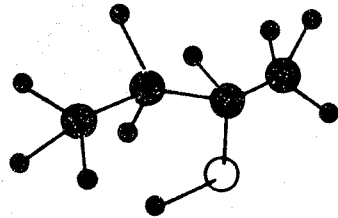
● väteatom



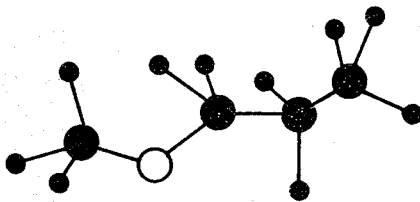
a) dietyleter "vanlig eter"
 $CH_3-CH_2-O-CH_2-CH_3$
smältpunkt: okänd
kokpunkt: $35^\circ C$



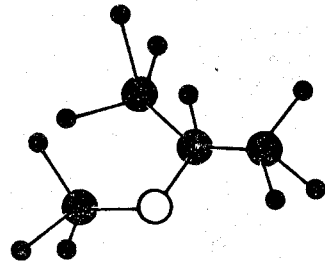
d) 1-butanol
 $CH_3-CH_2-CH_2-CH_2OH$
smältpunkt: $-89^\circ C$
kokpunkt: $118^\circ C$



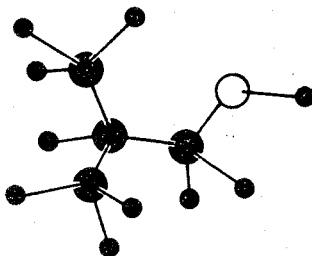
e) 2-butanol
 $CH_3-CH_2-CHOH-CH_3$
smältpunkt: $-89^\circ C$
kokpunkt: $100^\circ C$



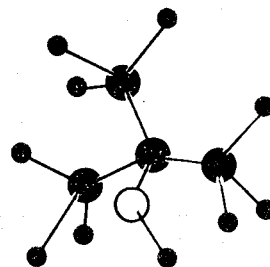
b) metylpropyleter
 $CH_3-O-CH_2-CH_2-CH_3$
smältpunkt: okänd
kokpunkt: $39^\circ C$



c) metylisopropyleter
 $CH_3-O-CH(CH_3)_2$
smältpunkt: okänd
kokpunkt: $33^\circ C$



f) 2-metyl-1-propanol
 $(CH_3)_2CH-CH_2OH$
smältpunkt: $-108^\circ C$
kokpunkt: $108^\circ C$



g) 2-metyl-2-propanol
 $CH_3-COH-CH_3$
CH₃
smältpunkt: $26^\circ C$
kokpunkt: $83^\circ C$