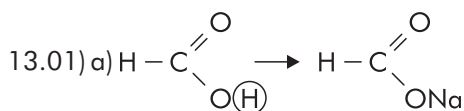


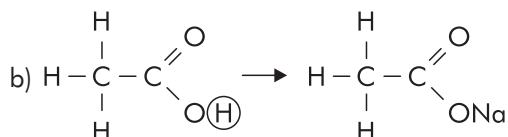
Química E – Extensivo – V. 4

Resolva

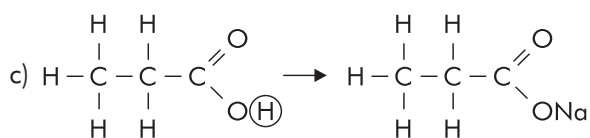
Aula 13



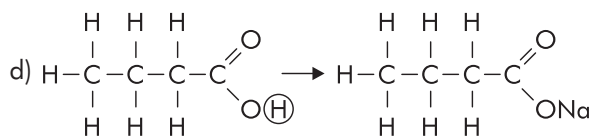
metanoato de sódio
formato de sódio



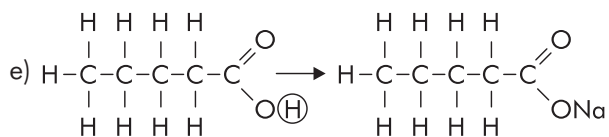
etanoato de sódio
acetato de sódio



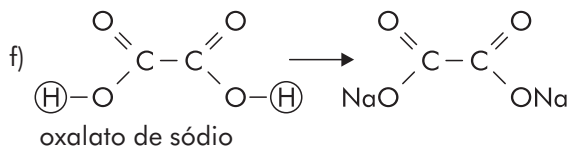
propanoato de sódio
propionato de sódio



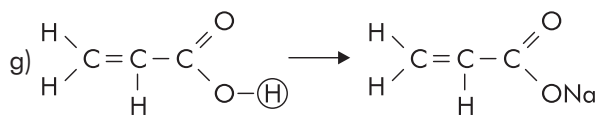
butanoato de sódio
butirato de sódio



valerato de sódio

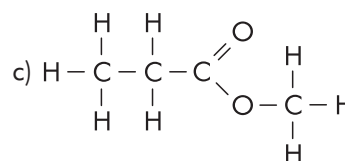
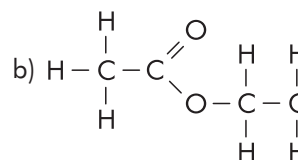
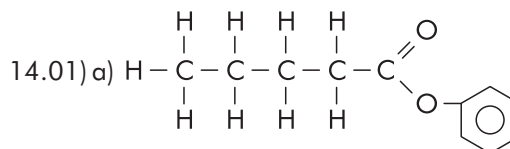


oxalato de sódio

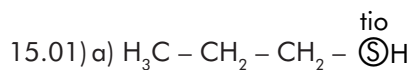


acrilato de sódio

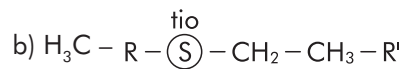
Aula 14



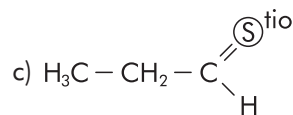
Aula 15



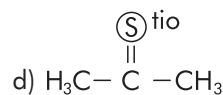
$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{OH}$ álcool



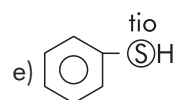
$\text{H}_3\text{C}-\overset{\text{éter}}{\text{O}}-\text{CH}_2-\text{CH}_3$ éter



$\text{H}_3\text{C}-\text{CH}_2-\overset{\text{aldeído}}{\text{C}}(\text{H})=\text{O}$



$\text{H}_3\text{C}-\overset{\text{cetona}}{\text{C}}(=\text{O})-\text{CH}_3$

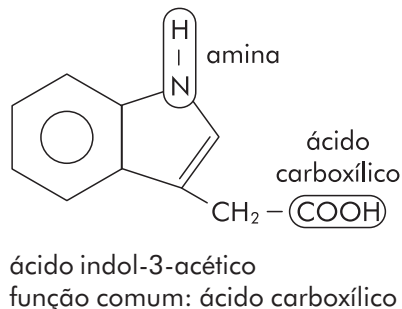
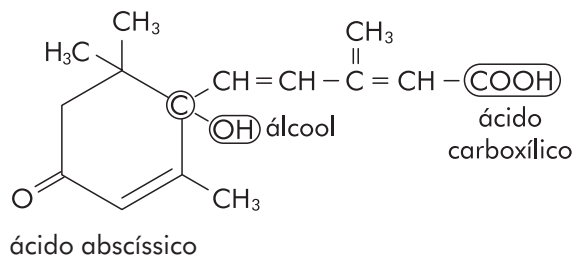


$\text{C}_6\text{H}_5-\text{OH}$ fenol

Testes

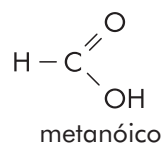
Aula 13

13.01) B

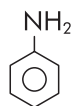


13.02) B

a) **Incorreto.**

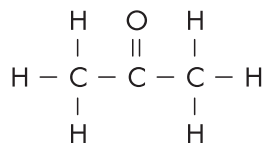


b) **Correto.**



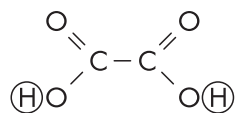
fenilamina (anilina)

c) **Incorreto.**



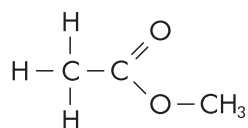
acetona (propanona)

d) **Incorreto.**



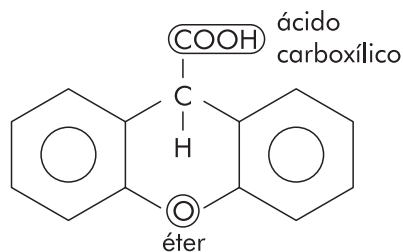
ácido oxálico

e) **Incorreto.**



etanoato de metila (éster)

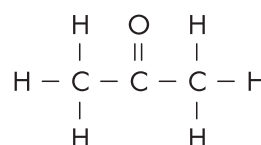
13.03) C



13.04) B

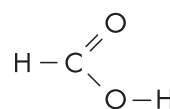
a) **Certa.**

acetona (propanona)

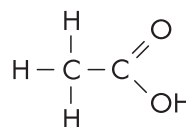


b) **Errada.**

ácido fórmico (metanóico)



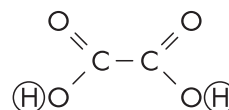
c) **Certa.**



etanóico

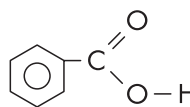
acético

d) **Certa.**



O ácido oxálico possui dois hidrogênios ionizáveis.

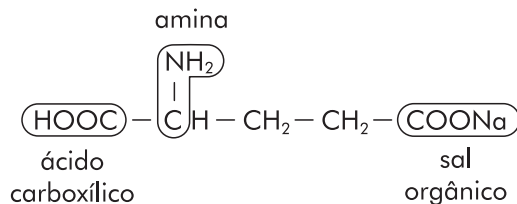
e) **Certa.**



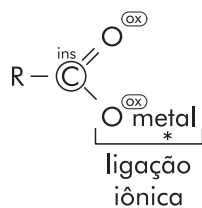
13.05) E

Ácidos graxos: ácidos carboxílicos de cadeia longa.

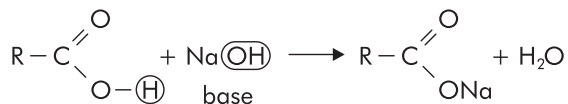
13.06) A



13.07) B



13.08) A

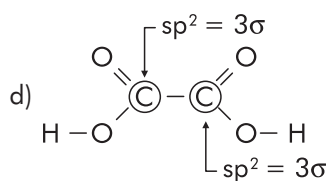
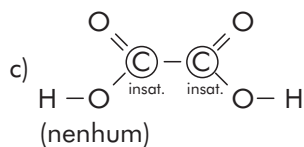
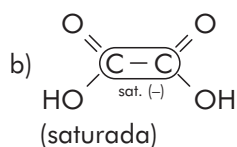


ácido carboxílico

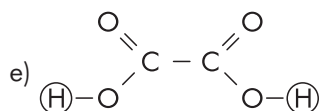
13.09) C

Os sais de ácidos carboxílicos de cadeia longa são chamados de sabões.

13.10) a) $C_2H_2O_4$



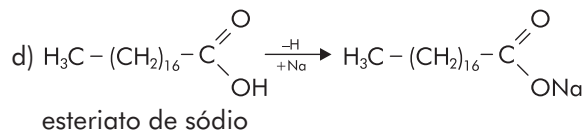
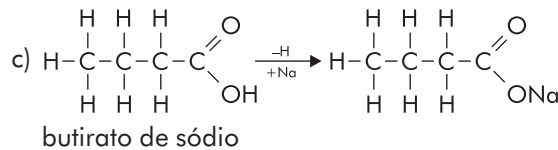
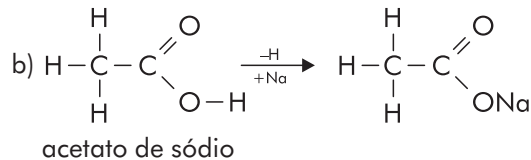
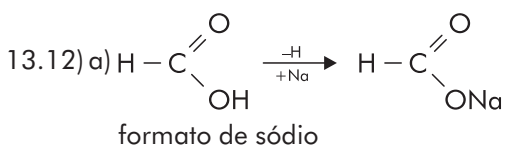
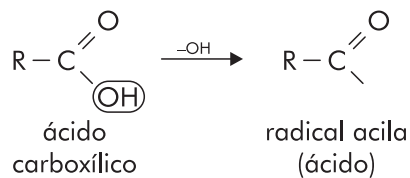
$C(sp^2)$



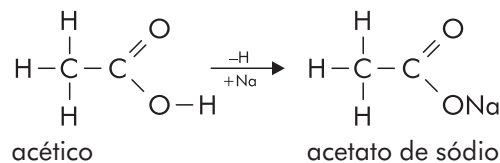
$2H^+$ (ionizáveis)

f) ácido etanodióico

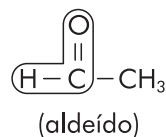
13.11) D



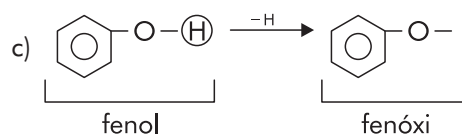
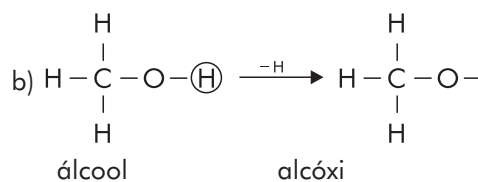
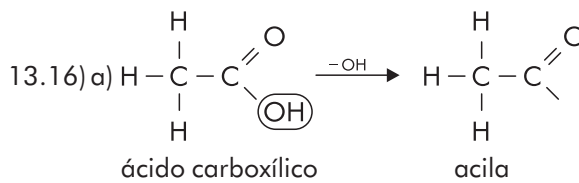
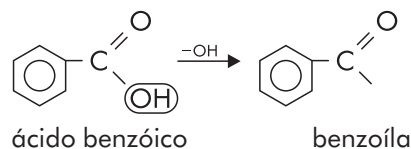
13.13) B



13.14) E

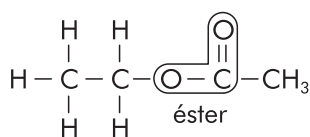


13.15) C

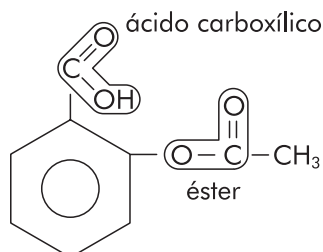


Aula 14

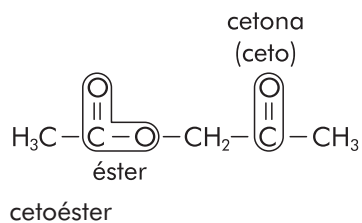
14.01)A



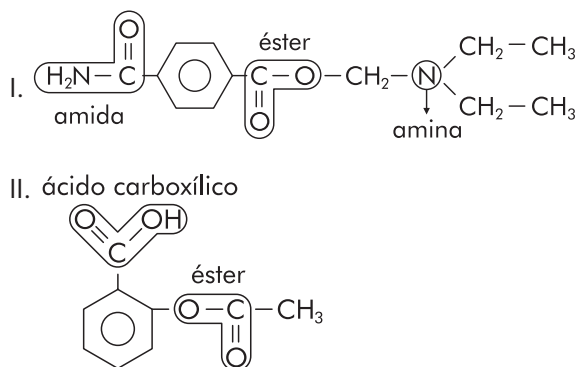
14.02)C



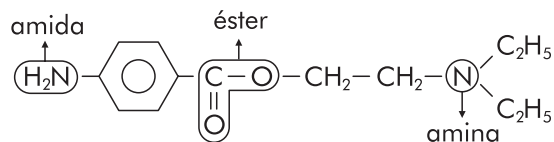
14.03)B



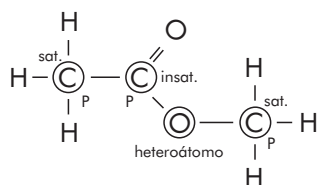
14.04)B



14.05)D



14.06)86

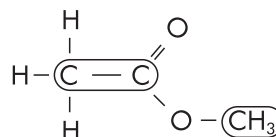


01. **Incorreta.**

02. **Correta.** Cadeia saturada (somente ligações simples entre carbonos).

04. **Correta.**

08. **Incorreta.**

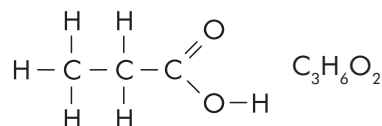


etanoato de metila

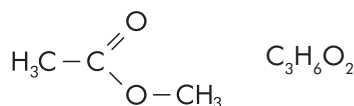
16. **Correta.**

32. **Incorreta.**

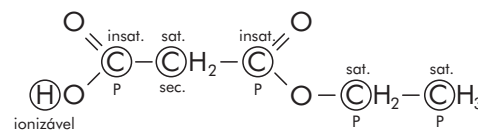
64. **Correta.**



propanóico



14.07)63



01. **Verdadeira.**

02. **Verdadeira.**

04. **Verdadeira.**

08. **Verdadeira.**

16. **Verdadeira.**

32. **Verdadeira.** (C, H, O).

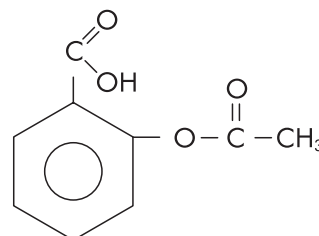
14.08)D

Gorduras – ésteres de ácidos saturados (-).

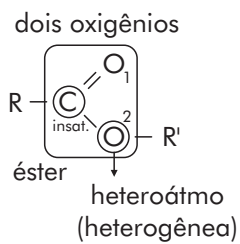
Óleos – ésteres de ácidos insaturados (=, ≡).

14.09)B

Aspirina (ácido acetilsalicílico)



14.10) B

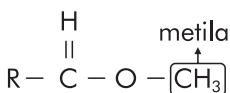
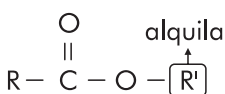


14.11) B

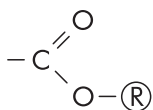
flavorizantes \Rightarrow essência



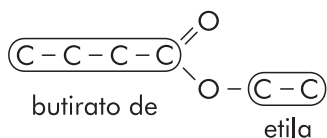
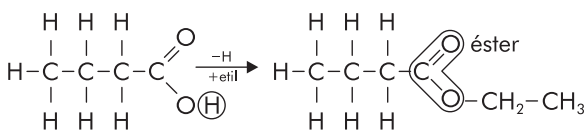
14.12) B



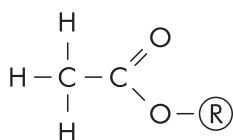
essências (ésteres)



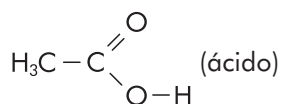
14.13) éster – butirato de etila



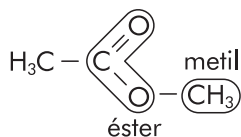
14.14) 56



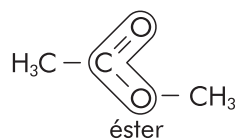
01. **Incorreta.**



02. **Incorreta.**

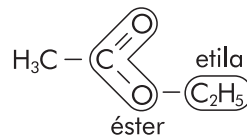


04. **Incorreta.**

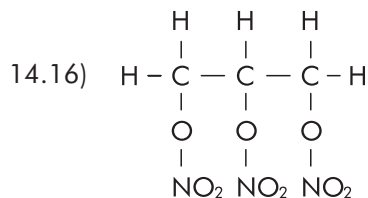
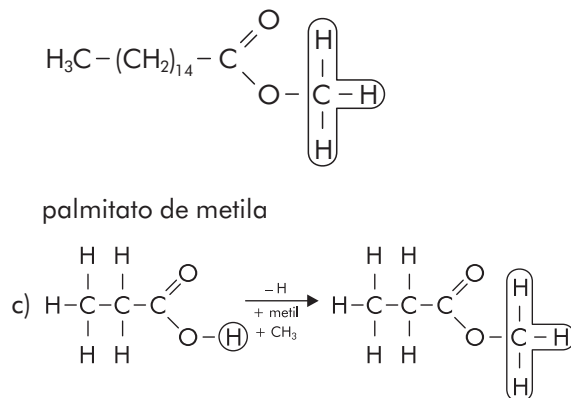
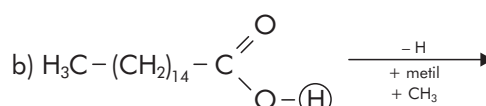
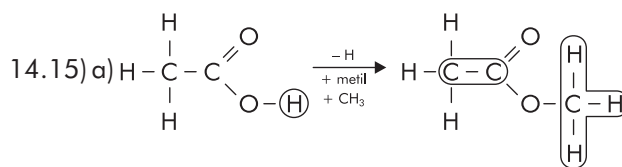
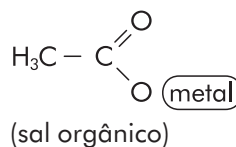


08. **Correta.**

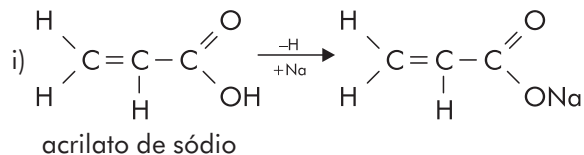
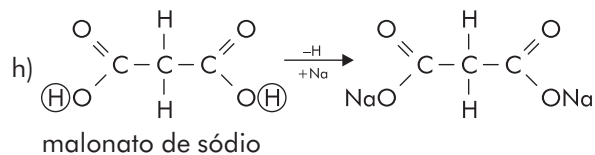
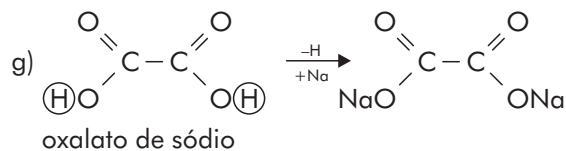
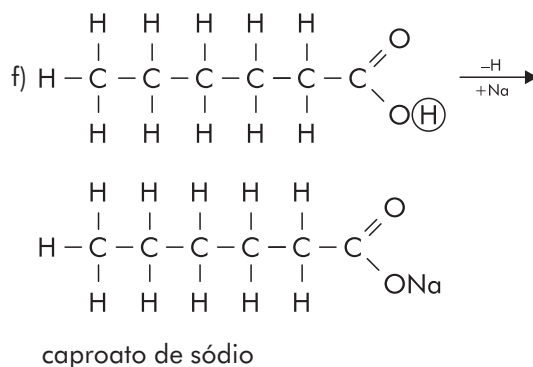
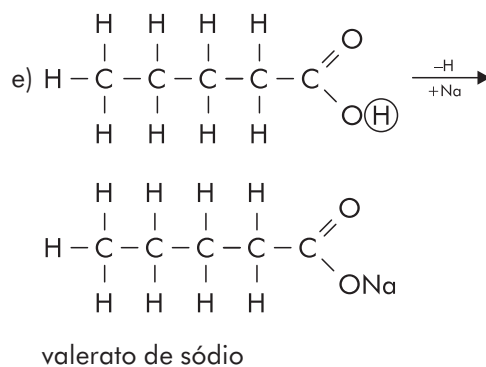
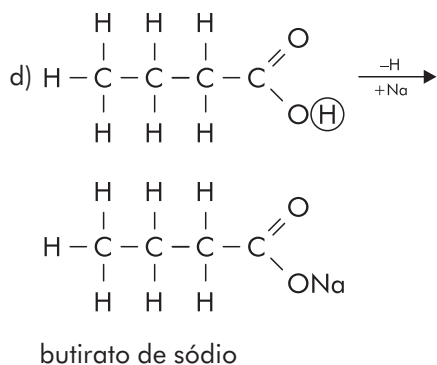
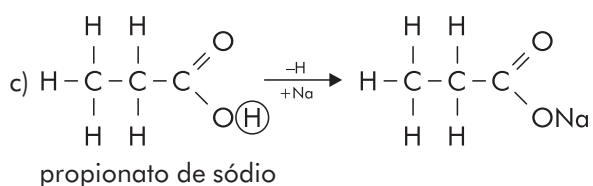
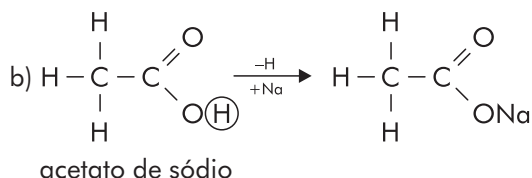
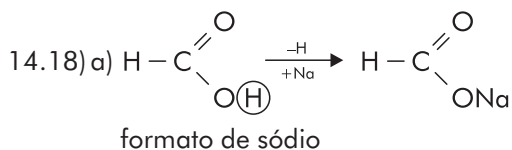
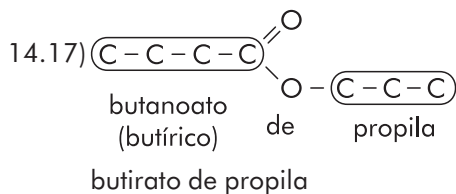
16. **Correta.**



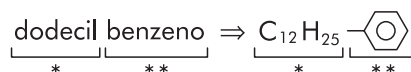
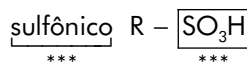
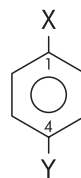
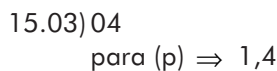
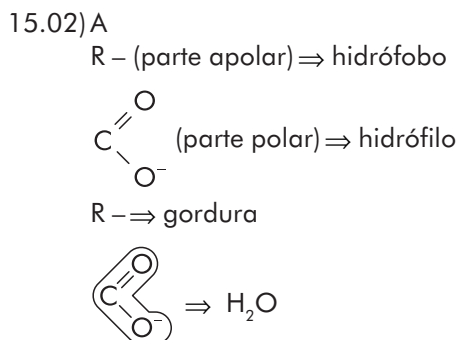
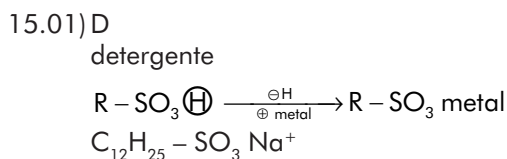
32. **Correta.**



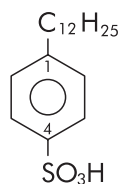
(TNG)
R-O-NO₂
éster inorgânico



Aula 15



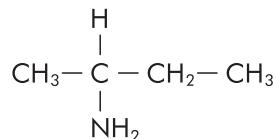
Juntando:



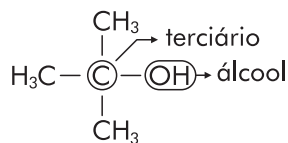
15.04) E



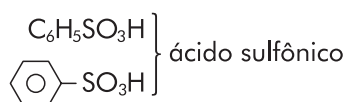
15.05) D



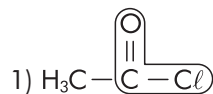
amina primária



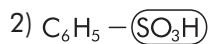
álcool terciário



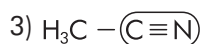
15.06) B



cloreto de ácido (haleta de acila)



ácido sulfônico



nitrilo

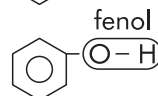
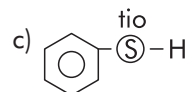
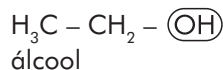
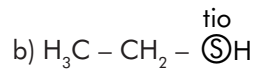
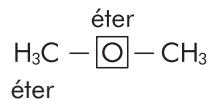
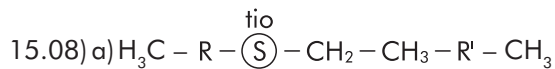
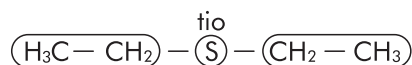
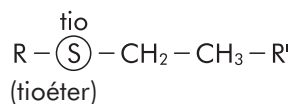


cloreto de alquila(o)



nitrocomposto

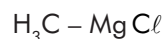
15.07) C



fenol

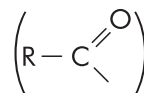
15.09) D

{ iônico (metal x não-metal)
não-oxigenado
orgânico

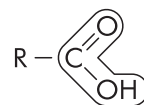


15.10) 19

{ R = radical orgânico
AC ⇒ radical acila

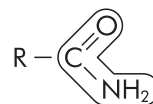


01. Correta.



ácido carboxílico

02. Correta.

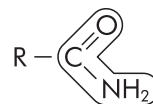


amida

04. Incorreta.



08. Incorreta.




amida

$RH \rightarrow C_xH_y \Rightarrow$ hidrocarboneto

éter
 $ROR \rightarrow R-\text{O}-R$
 oxigênio
 entre O

éter

$R-NH_2 \rightarrow \text{R}-\underset{\text{H}}{\text{N}}-H \Rightarrow$ amina primária (1 radical)

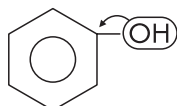
15.19) fenil  magnésio Mg brometo Br

composto de Grignard
 brometo de fenil magnésio


15.20) 4 - 14 - 13 - 2 - 10 - 8 - 5 - 11 - 9 - 6 - 3 - 1 - 7 - 12

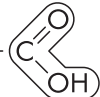
1) 
 anidrido de ácido

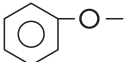
2) $Ar-OH$



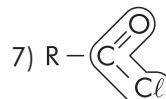
fenol

3) 
 aldeído

4) 
 ácido carboxílico

5) 
 radical orgânico
 fenóxi

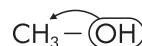
6) $\left\{ \begin{array}{l} R-O^{\ominus} \\ CH_3-O^{\ominus} \end{array} \right.$
 radical orgânico
 monovalente
 alcóxi



cloreto de ácido

8) R^{\ominus}
 radical orgânico
 monovalente

9) $R-OH$



álcool

10) $R-X \rightarrow 7A (Cl, Br, I, F)$

$R-Cl$

haleto orgânico

11) $R-H$

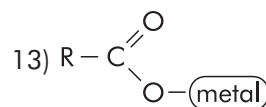
CH_4

hidrocarboneto

12) $R-O-R$

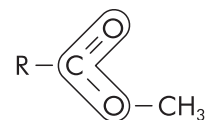
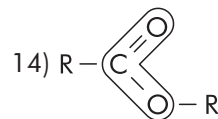


éter



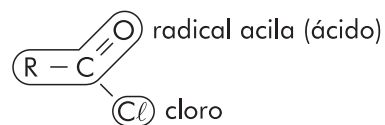
sal orgânico

sabão

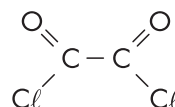


éster (essência)

15.21) B



15.22) C

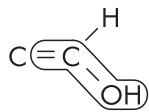


Aula 16

16.01) a) hidrocarboneto (C_xH_y)

1, 2, 3, 20, 35

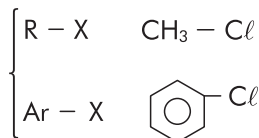
b) enol (enóis)



31, 34

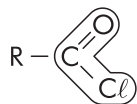
c) haletos de R ou Ar

7A (Cl, Br, I, F)



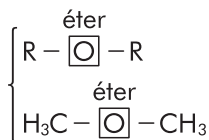
9, 11, 13, 27

d) haletos (7A) de acila



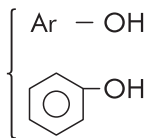
7, 29, 30

e) éter



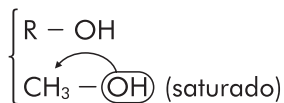
8, 32, 33

f) fenóis



17, 19

g) álcoois



6, 16, 23

h) ésteres



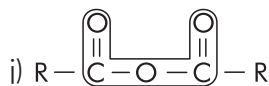
R ≠ H

14, 24, 28, 36



ácido carboxílico

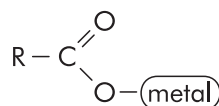
4, 10, 18



anidrido de ácido

12, 15, 21, 26

k) sais orgânicos



5, 22, 25

16.02) 92

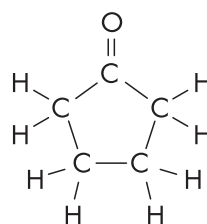
01. **Incorreta.**

éter



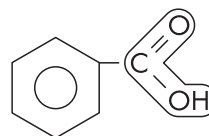
metoxietano

02. **Incorreta.**



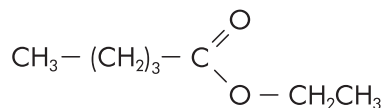
ciclopentanona

04. **Correta.**



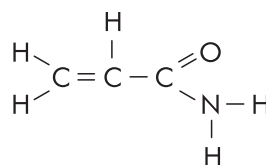
ácido benzóico

08. **Correta.**



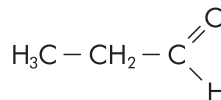
pentanoato de etila

16. **Correta.**



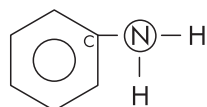
propenamida

32. **Incorreta.**



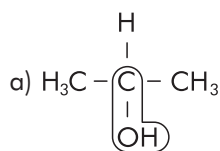
aldeído (propanal)

64. **Correta.**

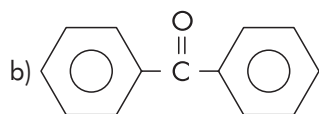


amina (fenilamina)

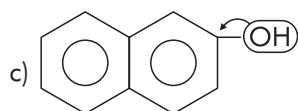
16.03)7



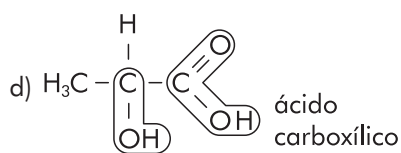
álcool secundário



cetona (1 ponto)

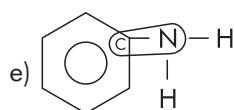


fenol

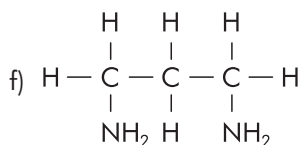


álcool

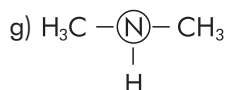
ácido carboxílico



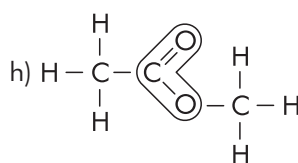
amina primária



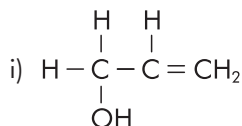
amina primária



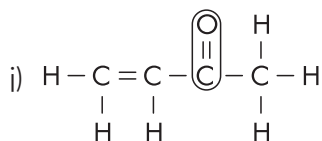
amina secundária (2 pontos)



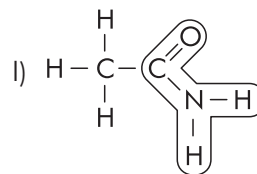
éster



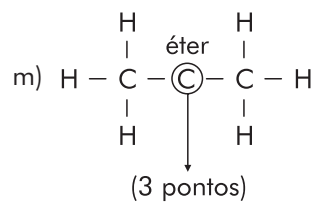
álcool



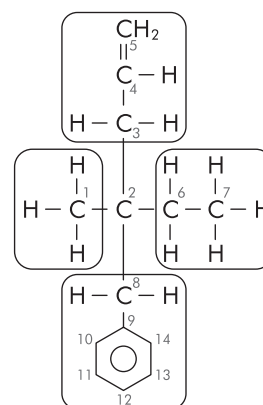
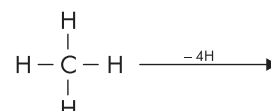
cetona (1 ponto)



amida

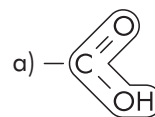
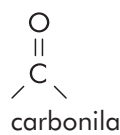


16.04)A

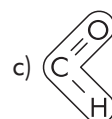
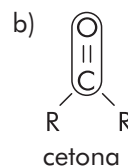


$C_{14}H_{20}$

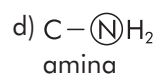
16.05)D

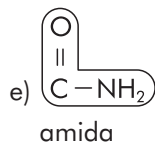


ácido carboxílico

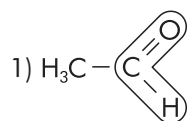


aldeído

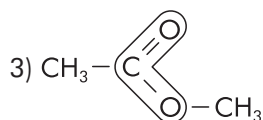
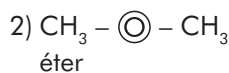




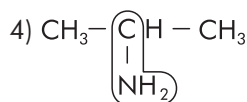
16.06) B



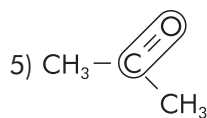
aldeído



éster

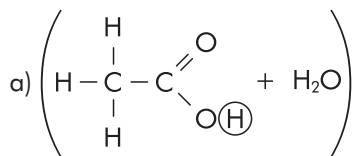


amina

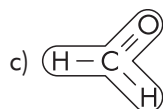
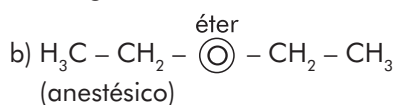


cetona

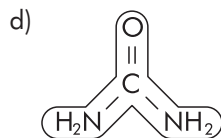
16.07) A



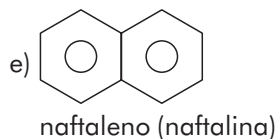
vinagre



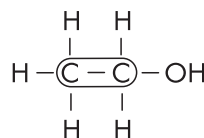
formol (conservação de cadáveres)



uréia (fertilizantes)

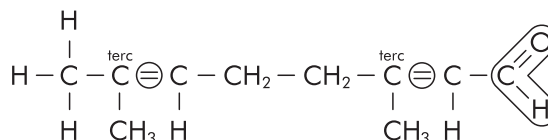


16.08) B



etanol
álcool etílico

16.09) E



aldeído

cadeia: aberta, acíclica, alifática; homogênea; insaturada; ramificada

16.10) 01

01. **Correta.**

álcool \rightarrow (OH)- ligado a carbono saturado


02. **Incorreta.**

hidrocarbonetos C_xH_y

04. **Incorreta.**

O
||
C - N (amidas)
R - NH₂ (aminas)

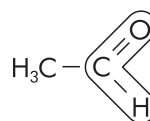
08. **Incorreta.**

entre carbonos

dupla

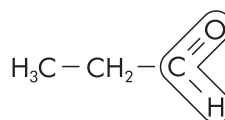
alcenos

16. **Incorreta.**

aldeídos

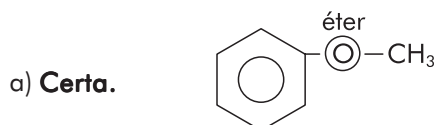


etanal

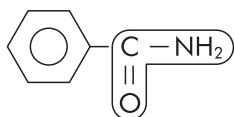


propanal

16.11) C

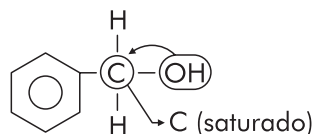


b) **Certa.**



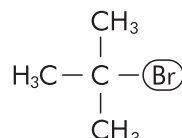
amida

c) **Errada.**



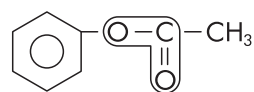
álcool ≠ fenol

d) **Certa.**



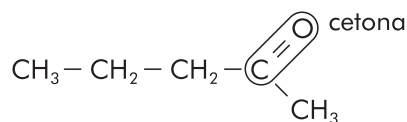
haleto de alquila

e) **Certa.**

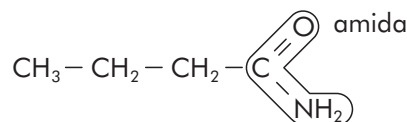


éster

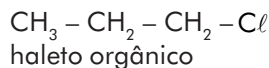
04. **Incorreta.**



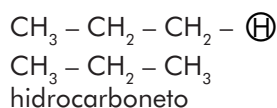
08. **Incorreta.**



16. **Correta.**



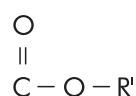
32. **Correta.**



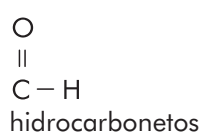
16.14) 14

16.12) B

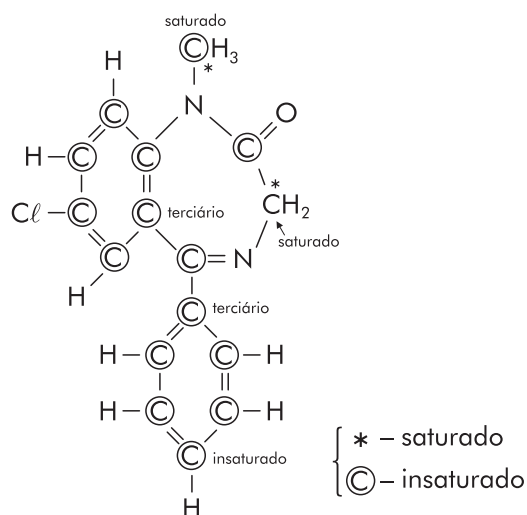
éster



$\text{R}' \neq \text{H}$
aldeído

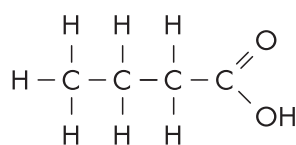


C_xH_y
álcool
 $\text{R} - \text{OH}$

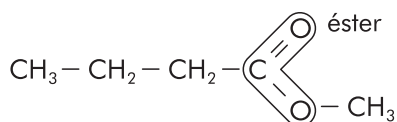


{ * - saturado
○ - insaturado

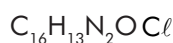
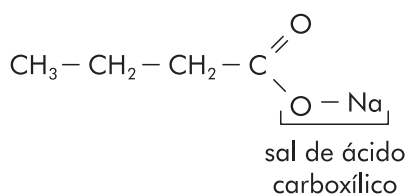
16.13) 51



01. **Correta.**



02. **Correta.**

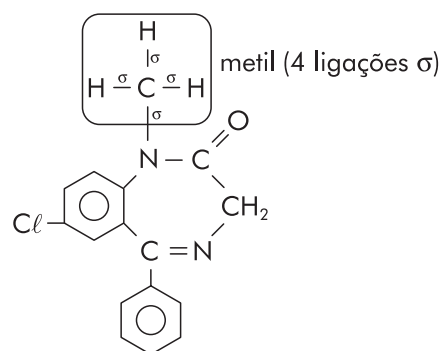


01. **Incorreto.**

02. **Incorreto.**

04. **Incorreto.** 14 carbonos insaturados e 2 carbonos saturados

08. **Correto.**



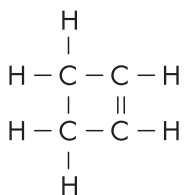
16. **Incorreto.**

16.16) D

32. **Incorreto.**

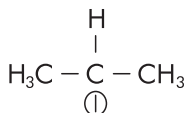
16.15) 19

01. **Correta.**



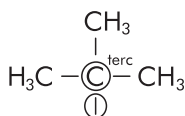
ciclobuteno

02. **Correta.**



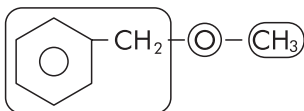
isopropil/sec-propil

04. **Incorreta.**



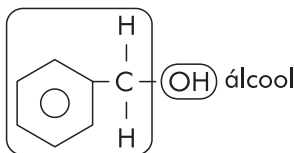
terc-butil

08. **Incorreta.**



éter metilbenzílico

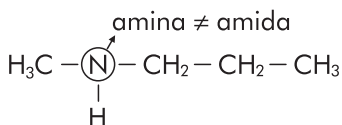
16. **Correta.**



benzil

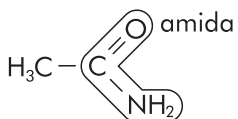
álcool benzílico

32. **Incorreta.**

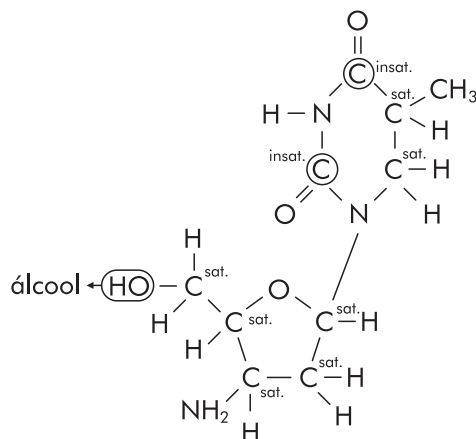


metilpropanamina

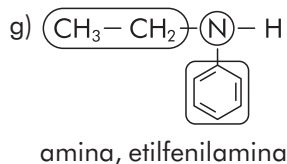
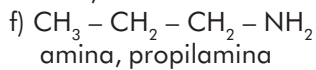
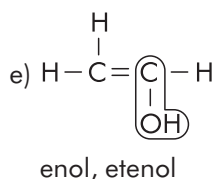
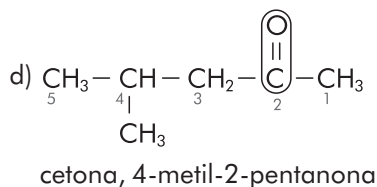
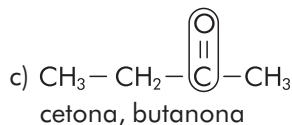
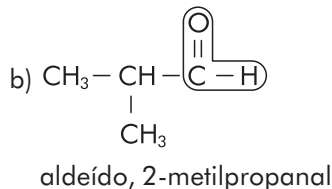
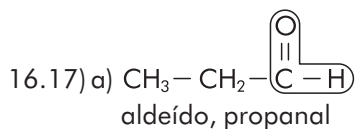
64. **Incorreta.**

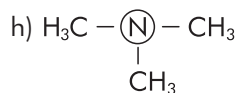


etilamida

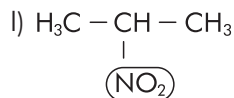
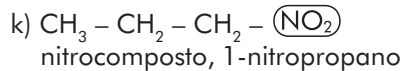
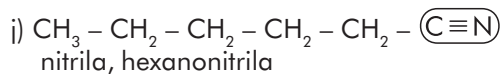
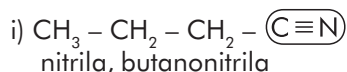


álcool

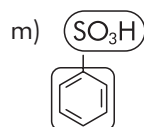




amina, trimetilamina



nitrocomposto, 2-nitropropano



ácido sulfônico, ácido benzeno sulfônico

