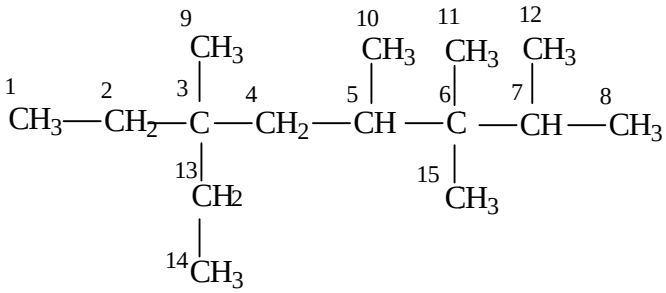
REMIDI ULANGAN HARIAN

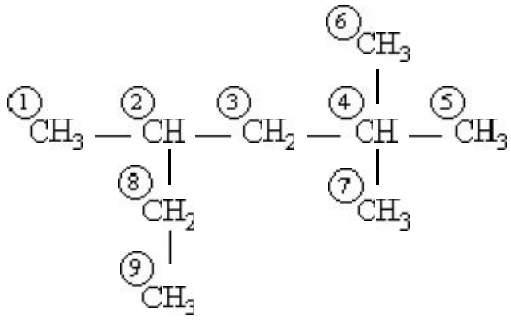
Materi : Hidrokarbon
Kelas : XI IA 3
Hari/Tanggal : Senin/8 September 2014
Alokasi Waktu : 60 menit

1. Tentukan jumlah dan sebutkan atom C primer, sekunder, tersier dan kuartener dari senyawa berikut !

a.

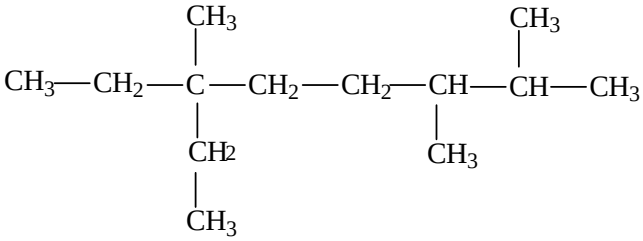


b.

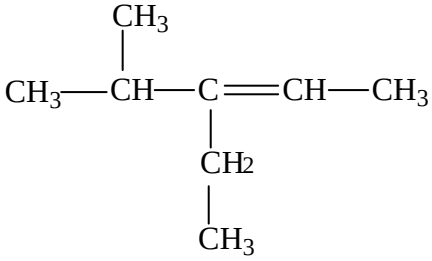


2. Berilah nama sesuai IUPAC dari struktur senyawa berikut!

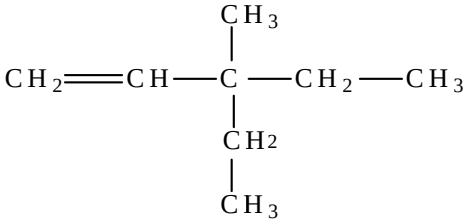
a.



b.

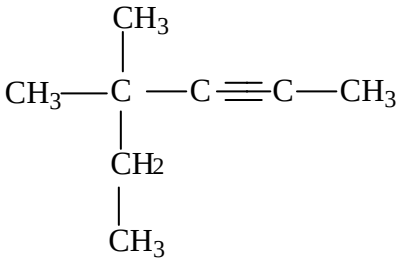


c.

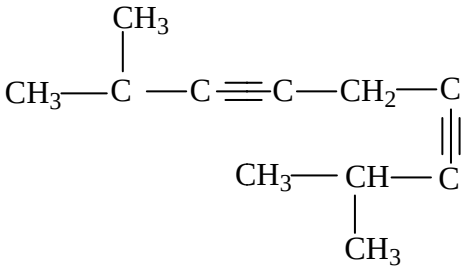


d. $CH_3CH_2CH(CH_3)C(CH_3)_2CH(C_2H_5)$

e.



f.



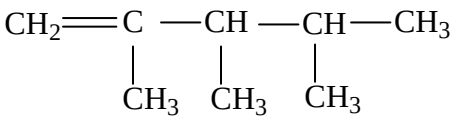
3. Tulislah struktur dari senyawa berikut!
   a. 2,3,4-trimetil-1-pentena
   b. 6–etil–2,2–dimetiloktana
   c. 2,2–dimetil–3–heksuna
   d. 4–etil–2,3–dimetilheksana
   e. 2-etil-4-metil-1-heksena
   f. 3,4-dietil-3,4,5-trimetil-1,6-oktadiena

4. Apakah nama senyawa berikut ini sudah sesuai dengan penamaan IUPAC? Betulkan jika masih ada nama yang salah.
   a. 4–metilbutana
   b. 2–etilbutana
   c. 2,2–dimetilbutana
   d. 3–metil–3–etilpentana
   e. 5-metilheksana
   f. 2-etil-3-heptena

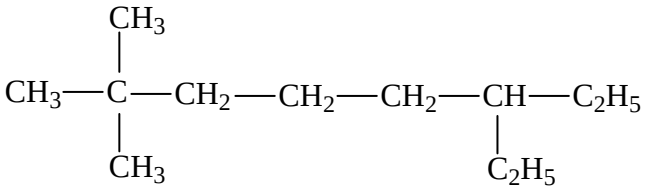
5. Gambarkan apa saja isomer dari heptana beserta dengan namanya!

Kunci jawaban :

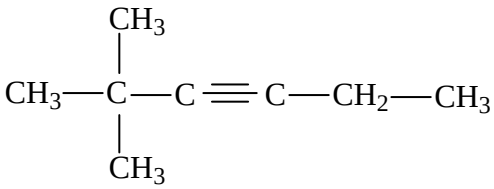
1. a. Primer : 1,8,9,10,11,12,14,15 (8)
   Sekunder : 2,4,13 (3)
   Tersier : 5,7 (2)
   Kuartener : 3,6 (2)
   b. Primer : 1,5,6,7,9 (5)
   Sekunder : 3,8 (2)
   Tersier : 2 (1)
   Kuartener : 4 (1)
2. a. 6-etil-2,3,6-trimetiloktana
   b. 3-etil-4-metil-2-pentena
   c. 3-etil-3-metil-1-pentena
   d. 3,4,4-trimetilheptana
   e. 4,4-dimetil-2-heksuna
   f. 2,8-dimetil-3,6-nonadiuna
3. a.



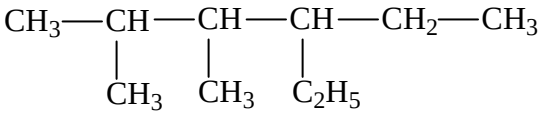
b.



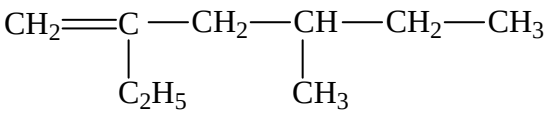
c.



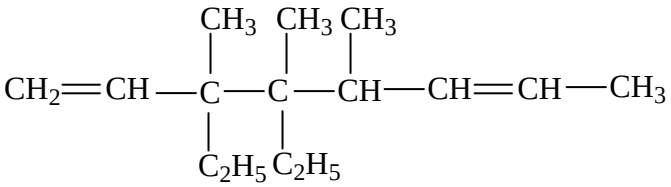
d.



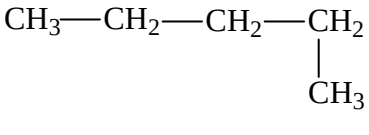
e.



f.

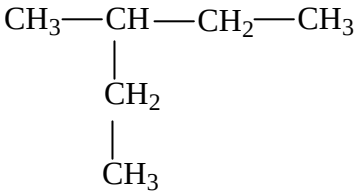


4. a.



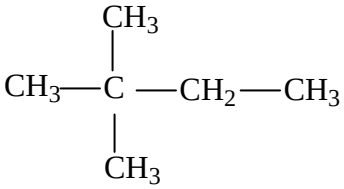
pentana

b.



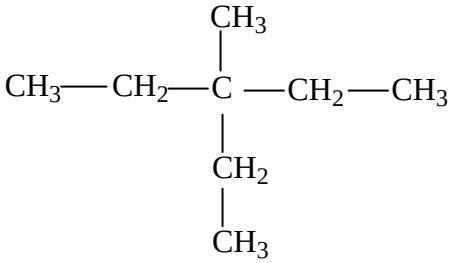
3-metilpentana

c.



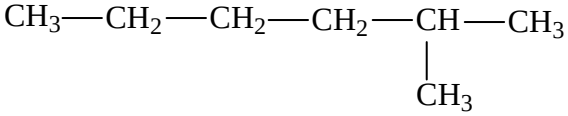
2,2-dimetilbutana

d.



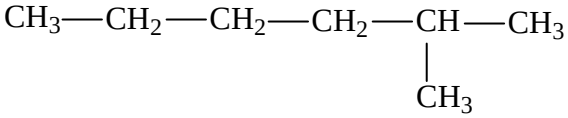
3-etil-3-metilpentana

e.



2-metilheksana

f.



3-metil-4-oktena

5.

$CH_3—CH_2—CH_2—CH_2—CH_2—CH_2—CH_3$

n-heptana

$$\begin{array}{l} CH_3—CH_2—\underset{\underset{CH_3}{|}}{CH}—CH_2—CH_2—CH_3 \end{array}$$

3-metilheksana

$$\begin{array}{l} CH_3—\underset{\underset{CH_3}{|}}{CH}—CH_2—CH_2—CH_2—CH_3 \end{array}$$

2-metilheksana

$$\begin{array}{l} \quad\;\; \overset{\overset{CH_3}{|}}{} \\ CH_3—C—CH_2—CH_2—CH_3 \\ \quad\;\; \underset{\underset{CH_3}{|}}{} \end{array}$$

2,2-dimetilpentana

$$\begin{array}{l} CH_3—\underset{\underset{CH_3}{|}}{CH}—\underset{\underset{CH_3}{|}}{CH}—CH_2—CH_3 \end{array}$$

2,3-dimetilpentana

$$\begin{array}{l} \quad\;\; \overset{\overset{CH_3}{|}}{} \\ CH_3—C—CH—CH_3 \\ \quad\;\; \underset{\underset{CH_3}{|}}{} \quad \underset{\underset{CH_3}{|}}{} \end{array}$$

2,2,3-trimetilbutana