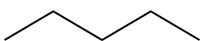
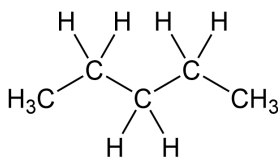


1. (2 points) What is the molecular formula for the following molecule?

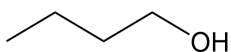


- (a) C<sub>4</sub>H<sub>9</sub>
- (b) C<sub>4</sub>H<sub>10</sub>
- (c) C<sub>5</sub>H<sub>10</sub>
- (d) C<sub>5</sub>H<sub>11</sub>
- (e) C<sub>5</sub>H<sub>12</sub>

(e) (2 points)

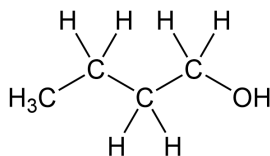


2. (2 points) What is the molecular formula for the following molecule?

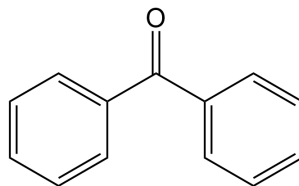


- (a) C<sub>4</sub>H<sub>9</sub>O
- (b) C<sub>4</sub>H<sub>10</sub>O
- (c) C<sub>5</sub>H<sub>9</sub>O
- (d) C<sub>5</sub>H<sub>10</sub>O
- (e) C<sub>5</sub>H<sub>11</sub>O

(b) (2 points)

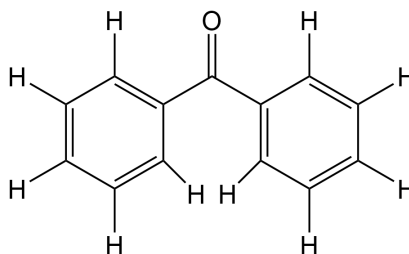


3. (2 points) What is the molecular formula for the following molecule?

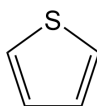


- (a)  $C_{10}H_{10}O$
- (b)  $C_{12}H_8O$
- (c)  $C_{12}H_{10}O$
- (d)  $C_{13}H_{10}O$
- (e)  $C_{13}H_{12}O$

(d) (2 points)

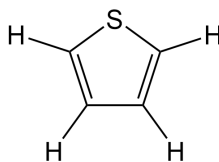


4. (2 points) What is the molecular formula for the following molecule?

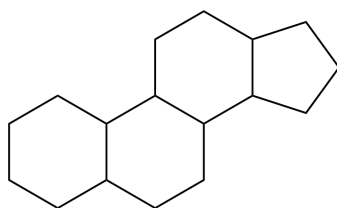


- (a)  $C_4H_4S$
- (b)  $C_4H_5S$
- (c)  $C_4H_6S$
- (d)  $C_4H_7S$
- (e)  $C_4H_8S$

(a) (2 points)

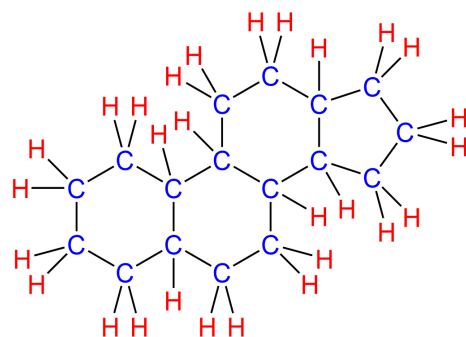


5. (1 points) What is the molecular formula for the following molecule?

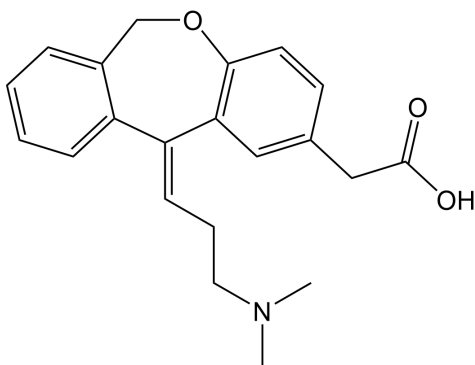


- (a)  $C_{17}H_{26}$
- (b)  $C_{17}H_{27}$
- (c)  $C_{17}H_{28}$
- (d)  $C_{17}H_{29}$
- (e)  $C_{17}H_{30}$

(c) (1 points)



6. (1 points) What is the molecular formula for the following molecule?



- (a)  $C_{21}H_{21}NO_3$
- (b)  $C_{21}H_{22}NO_3$
- (c)  $C_{21}H_{23}NO_3$
- (d)  $C_{21}H_{24}NO_3$
- (e)  $C_{21}H_{25}NO_3$

(c) (2 points)

