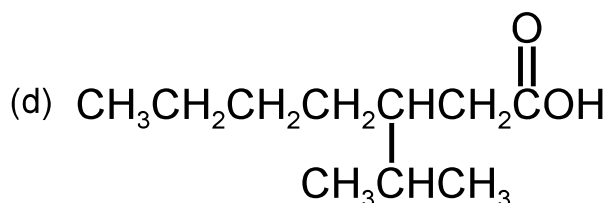
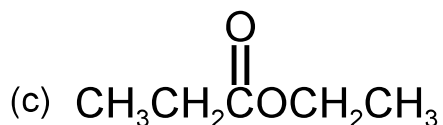
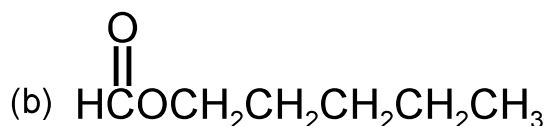
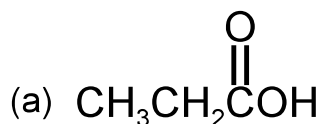


## PRACTICE

### Organic Chemistry Lesson 6: Carboxylic Acids and Esters

1. Name the following compounds.



2. Draw the structure for each of the following compounds.

(a) 3-methylhexanoic acid

(b) propyl pentanoate

3. The following compounds are better known by their nonsystematic names. For each compound, draw the structure and state the preferred common name. You should commit these common names to memory.

(a) methanoic acid

(b) ethanoic acid

4. Write the structural equation for each of the following reactions. Include any special conditions. Name the product of each reaction.

(a) controlled oxidation of butanal

(b) neutralization reaction between propanoic acid and potassium hydroxide

(b) esterification reaction between propan-1-ol and butanoic acid

5. Pentyl acetate (pentyl ethanoate) has an odour similar to bananas and is used in flavourings. Write the structural equation for the esterification reaction that would produce pentyl acetate.

6. Show a series of reactions that would convert but-1-ene to butanoic acid.