## **DEHYDRATION SYNTHESIS**

Name \_\_\_\_

In the following two examples of dehydration synthesis, show how the removal of the water molecule(s) takes place by drawing a ring around the components of water. Then, draw the structural formula of each product.

Synthesis of a Fat

1 glycerol molecule 3 fatty acid molecules 1 fat

3 water molecules

Formation of a Peptide Bond

amino acid

amino acid

dipeptide

+ water

HYDROLYS
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Name \_\_\_\_\_

Hydrolysis is the opposite of a dehydration synthesis. A large molecule is broken down into two or more smaller molecules by the addition of water.

Draw the structural formulas of the expected products in the two following hydrolysis reactions.

## Breakdown of a Disaccharide to Monosaccharides

disaccharide

## 2 monosaccharides

## Breakdown of a Lipid

3 fatty acids