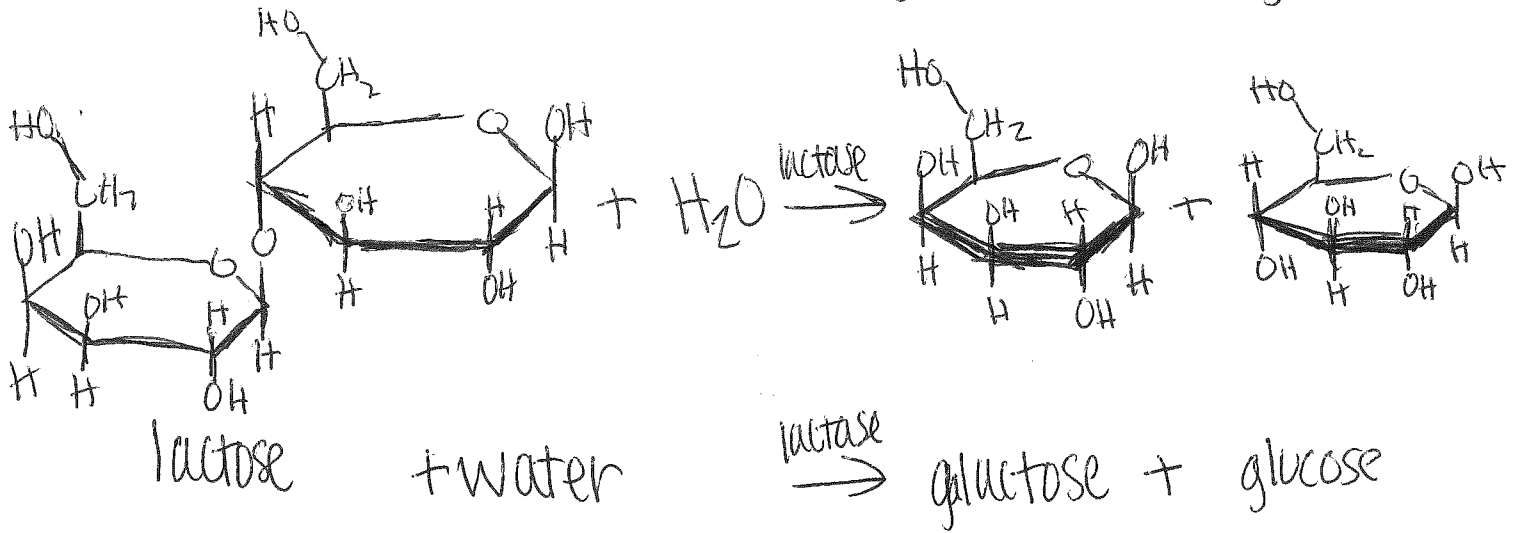
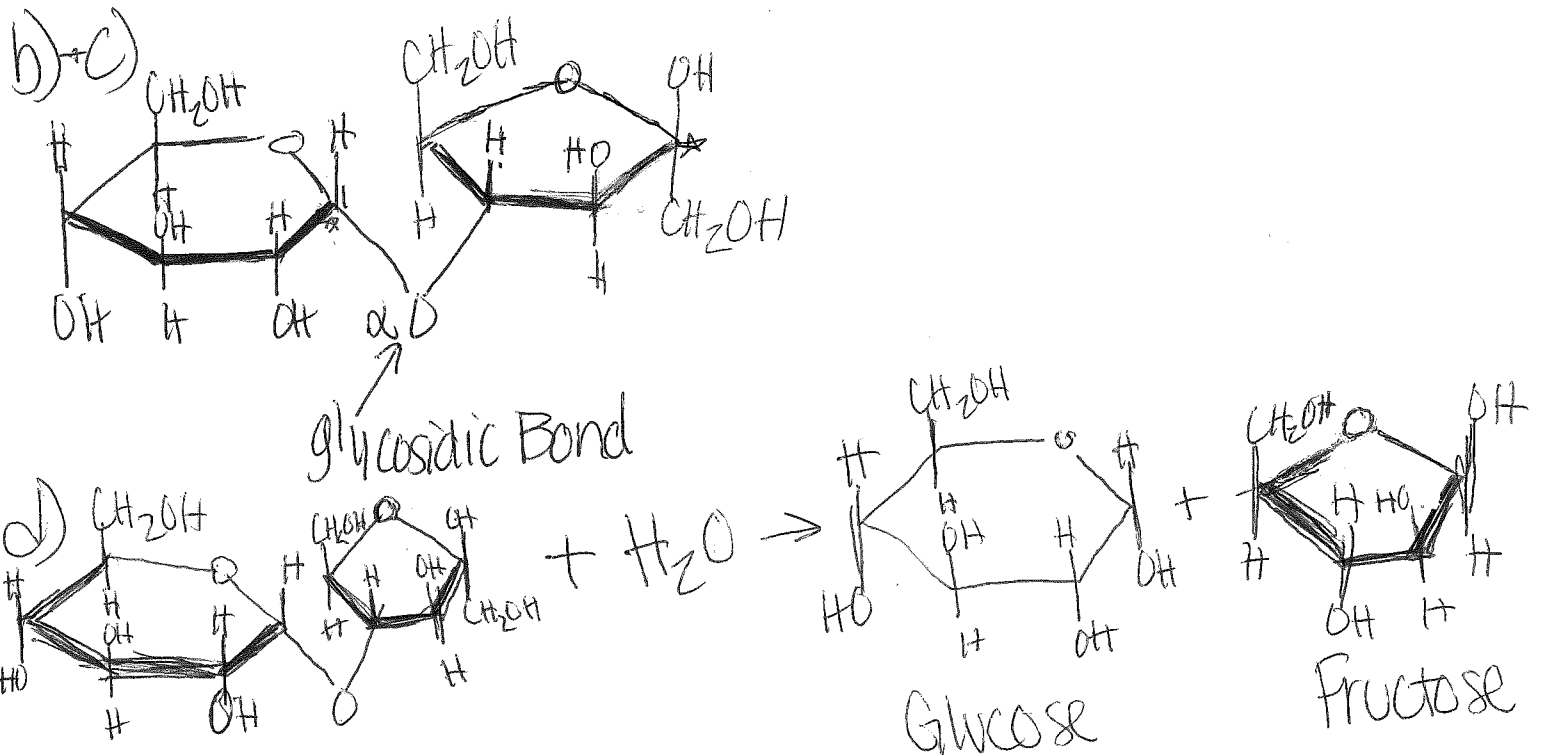


12:4
Carbohydrate Catabolism

54) Lactase is the enzyme that catalyzes the hydrolysis of lactase



55) a) Maltulose is a disaccharide since two monosaccharides make up a maltulose.



- 57) Glycolysis is a procedure that converts glucose into pyruvate.
- 58) Red blood cells, brain cells, and sperm cells use glycolysis as their sole source of energy.
- 59) Every intermediate in glycolysis contains a phosphoryl group. The 2^- charge on the phosphoryl group prevents the intermediate from diffusing out of the cell.
- 60) Under aerobic conditions, pyruvate is converted into acetyl CoA. If oxygen is not present, pyruvate is converted to lactic acid.
- 61) The primary role of carbohydrates is to produce energy.
- 62) Steps 3 and 6 produce a molecule that contains two phosphoryl groups.
- 63) Step 4 converts fructose-1,6-bisphosphate, a molecule containing 6 carbon atoms, into glyceraldehyde-3-phosphate and dihydroxyacetone, two molecules that contain 3 carbon atoms each.