**PRACTICE:** CITRIC ACID CYCLE

6. The conversion of one mole of acetyl-CoA to two moles of $CO_2$ results in the production of:

a. 1 mole of ATP
b. 1 mole of $FADH_2$
c. 1 mole of NADH
d. 2 moles of GTP
e. 2 moles of citrate

7. The reaction in the Citric Acid Cycle most similar to pyruvate dehydrogenase converts:

a. fumarate to malate
b. isocitrate to $\alpha$-ketoglutarate
c. succinate to aconitate
d. malate to oxaloacetate
e. $\alpha$-ketoglutarate to succinyl-CoA

8. The reaction in the Citric Acid Cycle that produces a GTP converts:

a. citrate to isocitrate.
b. malate to oxaloacetate.
c. fumarate to malate.
d. succinyl-CoA to succinate.
e. succinate to fumarate.

9. Which Citric Acid Cycle intermediate is considered prochiral?

a. citrate
b. isocitrate
c. malate
d. oxaloacetate
e. succinate

10. The conversion of one mole of pyruvate to three moles of carbon dioxide by pyruvate dehydrogenase and Citric Acid Cycle produces _____ moles of NADH, _____ moles of $FADH_2$, and _____ moles of ATP (=GTP).

a. 2:2:2
b. 3:3:1
c. 3:2:0
d. 4:1:1
e. 4:2:1

11. The glyoxylate cycle:

a. occurs in muscle, but not the liver.
b. occurs in the liver, but not muscle.
c. produces nucleic acids.
d. uses acetyl-CoA for energy and synthesis of biosynthetic precursors.
e. is an alternative pathway when oxygen is low.