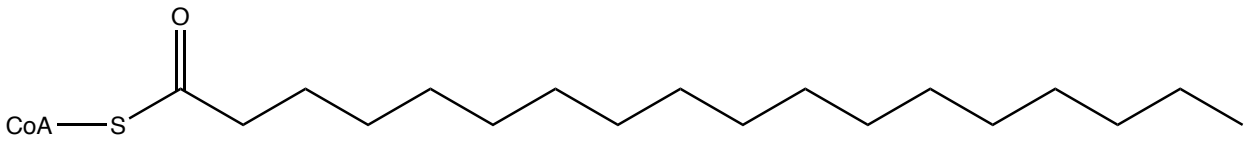
Name: _____ Quiz 19



For the complete oxidation of the above acyl-CoA:

1. How many round of β-oxidation will occur?
2. How many rounds of the citric acid cycle will occur?
3. How many CO_2 will be produced?
    a. What enzymes catalyze the steps that will release CO_2
4. How many NADH will be produced?
    a. What enzymes catalyze the steps that produce NADH?
5. How many $FADH_2$ will be produced?
    a. What enzymes catalyze the steps that produce $FADH_2$?
6. How many GTP will be produced?
    a. What enzymes catalyze the steps that produce GTP?

If all the resulting NADH and $FADH_2$ are processed through the Electron Transport Chain and ATP synthase:

7. What magnitude of proton difference across the inner mitochondrial membrane will be produced?
8. How many O_2 will be used?
9. How many ATP will be produced?