## What You Should Know!

1.) What is one way in which the exponential "e" is useful in modeling our world?

2.) Why are complex numbers useful. That is, what general problem did their invention fix?

3.) In the complex plane, what is graphed along the x-axis? Along the y-axis?

4.) What is a Taylor expansion? (You don't need to know how to use it, just know what it does for you.)

5.) According to their Taylor expansions,  $\cos(\omega t) + i \sin(\omega t)$  is equal to what?