# Section 11.7 Worksheet: Taylor Series

1. The **coefficients** $a_n$ of the powers $(x - c)^n$ in a Taylor series have a very special relationship to the function $f$ defined by the Taylor series, as well as to the point $c$ about which it is centered: characterize this relationship.

2. What's the difference between a Taylor series and a Maclaurin series?

3. What do you notice about the powers that appear in the power series expansion of sin by comparison with the powers that appear in the power series expansion of cos?

4. Is it legal (in the State of Kentucky) to add, subtract, multiply, or divide Taylor series?