

Study Guide for Chap 07

1. Skip section 7.1.
2. Study the meaning of 'separable differential equations'. Write down a few examples. Then study the procedure of solving them.
3. Memorize the definitions of the six hyperbolic functions. Study the graph of \sinh , \cosh and \tanh . Derive and memorize the derivative of the six hyperbolic functions. Be able to derive the derivatives of the six 'inverse hyperbolic functions' (need not memorize them). Study the formula for arclength and area of surface of revolution
4. Study the meaning of 'little o ' and 'Big O '. Write a few examples for both. Memorize the standard examples such as logarithm functions, polynomials and exponential functions and the relative growth rates among them (ie. which one grows fastest, which one slowest).