

Math 312 (Complex Analysis) – Week 5
Spring Term 2004
BUCKMIRE

Wednesday February 18 *Class 12:*

The Complex Exponential Function. We shall study the key elementary function in Complex Analysis $f(z) = e^z$.

Reading:

Saff & Snider, (Section 3.2)

Homework 5: (due Friday February 20)

Saff & Snider, Section 3.2 # 1, 4, 5, 9, 12

Friday February 20 *Class 13:*

The Complex Trigonometric and Hyperbolic Functions. We shall show how the complex exponential functions is used to define the complex trigonometric functions ($\sin z$ and $\cos z$) and complex hyperbolic trigonometric functions ($\sinh z$ and $\cosh z$).

Reading:

Saff & Snider, (Section 3.2)

Homework 6: (due Friday February 27)

Saff & Snider, Section 3.2 # 13, 14, 15, 17, 18, **Extra Credit: #20, 23**

QUIZ #5