

CLASSWORK 13: FALL 2024

CPE₃₈₁

Instructor: Rahul Bhadani, The University of Alabama in Huntsville

October 9, 2024

Total: 10 points

Some points to remember:

1 Fourier Series.

$$x(t) = \cos 4t + \sin 6t$$

1. Write down the fundamental period of $x(t)$. **(2 points)**
2. Compute its exponential Fourier series by first determining its Fourier coefficients. **(8 points)**