

Quiz 7

**Problem 1** Use Cauchy's Integral Formula to compute the integral

$$\int_{C[0,2]} \frac{e^z}{z(z-3)} dz$$

**Problem 2** Compute the integral

$$\int_{C[0,4]} \frac{e^z}{z(z-3)} dz$$

*Hint:* the integrand is not holomorphic in the disk bounded by the path of integration. Use a decomposition into partial fractions.