MATH 231A: LECTURE 1 REFERENCES

1. Linear Transport Equations

- Evans Section 2.1 and 2.1.1. We did not discuss Duhamel's principle in Section 2.1.2, but see HW problem #1.1 for this.

- We also discussed the general situation of non-linear characteristics. This material for linear transport equations is described in Evans Section 3.2, particularly in 3.2.1 and 3.2.2.a.

- For more information on linear transport equations and first order ODE which underly the characteristics, read Strauss Chapter 1.2, and Taylor Chapter 1.2 (basic ODE) and 1.7 (vector-fields and flows).

2. Linear Transport vs. the Cauchy-Riemann Equations

- See the posted lecture notes.

- For basic material in complex analysis, in particular the Cauchy integral formula, refer to any standard text.