

[Redacted]

Southampton

23rd June 1964

Dear Tom,

At last I can get round to thanking you properly for your presents and your letters. I have not yet done any spinning with the new spindle, but it looks and feels as though it will spin very well. I have been very busy preparing to go away. The first job was to write out the first section of the new work on homotopy for dynamical systems to fix the notation for the rest of the work. The typist only produced one carbon for me so I sent that one on to Prof Dausk. I hope to get some helpful comments from him, and I expect to be able to check some of my rough work on the next section before I go to America on the 6th July. The examinations are almost over. We have had some trouble with the ordinary degree candidates this year - a higher proportion than usual seem to have deliberately cut it fine and have rather misjudged things. I have spent the morning discussing with David Kirby the first year analysis course which we are taking together next year. We still have not decided just how to get into it. One possibility which we are looking into is to talk about the d'Alembert, Euler, Fourier work on oscillating strings and heat flow, bringing out the disputes about what is a function, and to give

the student's examples on integration leading to some Fourier series, and to do some numerical work with hand-machines to see if the series really did converge. One major problem which still remains is to decide on a text-book. Which do you plump for now (apart from Hett's book on analysis which seems to be not available in the bookshop here)? Some time ago I came across a paper which contained some nice examples of sets and operations which satisfied all but one of the axioms for the reals, but I have misplaced my references - do you know where any such examples can be found?

I sent off a parcel full of tapes yesterday. The Kennedy tape is horribly fascinating. I transcribed the two small tapes. I think that I made as good a copy as is possible, but the originals are not brilliant. I am just sending back my tape recorder again to have the motors adjusted! What a lot of bother I have had with them.

Hope your turtles come on well - I am looking forward to collecting plants in America, but I shall not be there at a good time.

Best wishes

Frank