Test #3 on Introduction to the Internet

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Consider sending a large file of F bits from host A to host B. There are two links (and one switch) between them and the links are uncongested (that is, no queuing delays). Host A segments the file into segments of S bits each and adds h bits of header to each segment, forming packets of $L = h + S$ bits. Each link has a transmission rate of R bit/s. Assuming that F/S is an integer, find the value of S that minimises the delay of moving the file from host A to host B. Disregard propagation delay.