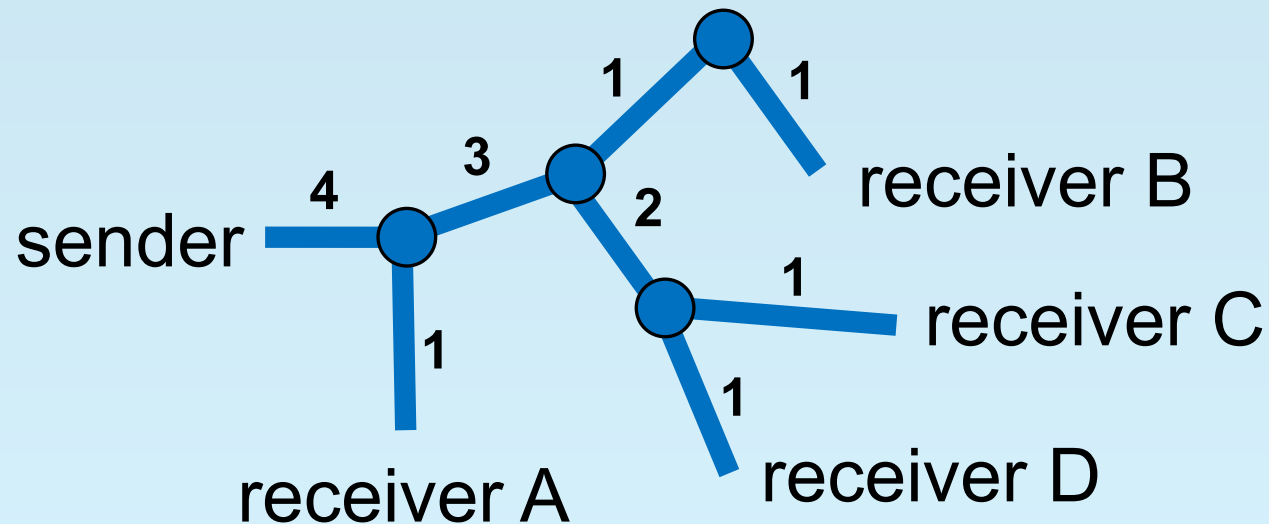# Sending the Same File to Many Receivers is Slow

Imagine a sender transmitting a file to four receivers.

How many copies cross each link?

Sender uses at most ¼ of the first link's data rate for each copy.

What if there are more receivers?