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- Properties of links

  - Bandwidth

  - Link Latency

  - Packet Delay

  -
  $$\text{packet delay} = \frac{\text{packet size}}{\text{Link bandwidth}} + \text{Link Latency}$$

- **Does CDMA waste bandwidth?**

- How many frequencies can you transmit on one wire?

  FDM would be worth it for packet switching if and only if the number of frequencies you can transmit at the same time is greater than the number of bits in a packet.

- How do VPNs work?

  Why do you need two transport and network layers?

- What's the difference between a router and a switch?

  Switches forward packets that are directly connected to it. They can only forward it to the devices that are connected to it – this only uses the data link layer using the MAC address.

  Routers send packets between networks using the IP address on the network layer.

- Shannon Information Formula

  What is the Noise Power

  What is the Signal Power

  What is Information Capacity

- Line Coding / Baud Rates

- Asynchronous versus Synchronous

  Slide 16 topic 3

  Which is which

  What's the real difference

- Difference between ATM and TDM

- Which layer is Ethernet?