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1. What properties set a local area network apart from other forms of networks?

Local area network is a network that interconnect a small area within a small area

Inexpensive

2. What is the difference between the physical representation of a starwired bus LAN and its logical representation

Logicaly looks like a bus but physically looks like a star.

3. they all receive frame and relay frames. Hub relay to everyone indiscriminately but switch have a system to identify who is who to deliver it.

4.Vitual LAN for example you can change a set of computers that is far away geologically

5. What does it mean when a switch or device is cut-through? What is the main disadvantage of a cut-through switch?

It will deliver frame as soon as they come rather than waiting for full frame. Very susceptible to data corruption and internet connection changes can affect the transmission very easily. Can’t perform error check when during transmission to the switsch has to be performed at computer instead

? 3. How is hub similar to a switch? How are they different? 4. Give an example of a situation in which a virtual LAN might be a useful tool in a business environment? What about in an educational environment? Is there a way to solve the disadvantage of a cut-through switch without losing its advantages? Defend your answer. 6. What are the differences between a shared segment network and a dedicated segment network? Give a common business example that mimics the differences between a shared segment network and a dedicated segment network.