Panel 1

- **Review**
  - (Free)
  - **Topology:** Mesh, Star, Bus, Ring, Hybrid
  - **Transmission Mode:** Simplex, Half-Duplex, Duplex
  - **Line Configs:** Multi-user, Point-to-Point

Panel 2

1. Which transmission mode can be compared to:
   - a) computer to monitor connection
   - b) a TV broadcast
   - c) a German Autobahn (Interstate)
   - d) a reversible commuter lane

2. Which topology features a point-to-point line configuration:
   - [ ] mesh
   - [ ] ring
   - [ ] star
   - [ ] bus

(check all that apply)
Panel 3

Quit

3. Assume six devices are arranged in a Mesh Topology.
   a) How many cables are needed?
   b) How many IO ports are needed for each device?
      (Extra Credit)

4. In what topology are the users to the right arranged?

Panel 4

Network Categories

LAN: Local area network; private; one owner, spends up 100 Mbps

MAN: Metropolitan area network; mixed; usually connects 2 or more LANs, e.g.
cable network; SHU main campus with law school

WAN: Wide area network, spans countries or world
Panel 5

Often \textit{WANs} connect \textit{LANs} to form an \textit{internet}.

\begin{itemize}
  \item \textit{LAN}
  \item \textit{WAN}
  \item \textit{LAN}
  \item \textit{WAN}
\end{itemize}

The Internet uses a part protocol and is one possible internet.

Panel 6

\textbf{Chapter 3: The OSI Model}

Networks are layered to reduce complexity.

\begin{itemize}
  \item Layer 7
    \begin{itemize}
      \item Secretaries
      \item Secretary
    \end{itemize}
  \item Layer 6
    \begin{itemize}
      \item Translators
      \item Translator
    \end{itemize}
  \item Layer 1
    \begin{itemize}
      \item Fax
      \item Fax
    \end{itemize}
\end{itemize}
Panel 7

**OSI - Open Systems Interconnection Model**

An ISO standard to abstractly model all networks.

OSI has 7 layers:

1. Physical
2. Data Link
3. Network Layer
4. Transport
5. Session
6. Presentation
7. Application

Panel 8

Diagram illustrating the OSI model with devices A and B interacting through various layers.

Device A

- Application
- Presentation
- Session
- Transport
- Network
- Data Link
- Physical

Device B

- Application
- Presentation
- Session
- Transport
- Network
- Data Link
- Physical

Links and protocols between layers are shown.