Networking:

Protocols → Rules

SonicWall

→ A language used by the computer to speak to each

TCP/IP → part of TCP/IP

HTTP or FTP

What this protocols do? and what are the port numbers?

identification → port number

File Transfer Protocol (FTP)

is used to share files with users in a LAN or a WAN
- → TCP port 20,21
- → Support authentication, authorization, and directory browsing.
- → Unencrypted - not recommended, use sftp.

Trivial File Transfer Protocol
- → Used to push (put) or pulls (get) files from a server.
- → Commonly use to manage devices like IP phones, routers and switches.
- → Does'nt support authentication, authorization and directory browsing.
- → UDP port 69
- → Unencrypted - not recommended, use sftp.

Secure File Transfer Protocol (SFTP)

is a secure implementation of FTP
- → Supports all the same functions as FTP but with encryption
- → SFTP is an extension of SSH which is why they they use the same port number
- → TCP port 22

FileZilla

a FTP application

Mail Protocols

- SMTP (Simple Mail Transfer Protocol) Sends
  - → outgoing mail to a server
  - → sends outgoing mail to a server
  - → TCP port 25

- POP3 (Post Office Protocol)
  - → Downloads incoming mail from a server
  - → TCP port 110

- IMAP (Internet Message Access Protocol) **
  - → synchronizes incoming mail from a server
  - → TCP port 143

Telnet:
- → provides remote command line access to interact with a server.
- → Considered insecure and should no longer be used, use SSH instead
- → Used TCP port 23

Secure Shell
- → Secure shell provides encrypted remote command line access to interact with a server.
- → SSH version 2 added SFTP and SCP support
- → TCP port 22

PuTTY
install it
It supports Telnet

DNS Domain Name Service
- → provides name to IP address resolution for host
- → Resolve Domain name to IP address
- → TCP/UDP port 53

DHCP Dynamic Host Configuration Protocol
- → provides various configuration to clients in an IP network via broadcast.
- → UDP port 67 is the server port, and 68 is the client port.

HTTP Hyper Text Transfer Protocol
- → is used to transmit webpages
- → TCP port 80

HTTPS Hyper Text Transfer Protocol Secure
is → used to securely transmit encrypted web pages using SSL or TLS
- → TCP port 443

NetBios
Network Basic Input/Output System
provides various network communication features in a Windows Network
- → Used in Windows before IP networking
- → NetBIOS over TCP/IP is still used in Windows
- → TCP/UDP port 137/139