

# IF2230 Computer Networks

Exercise 1

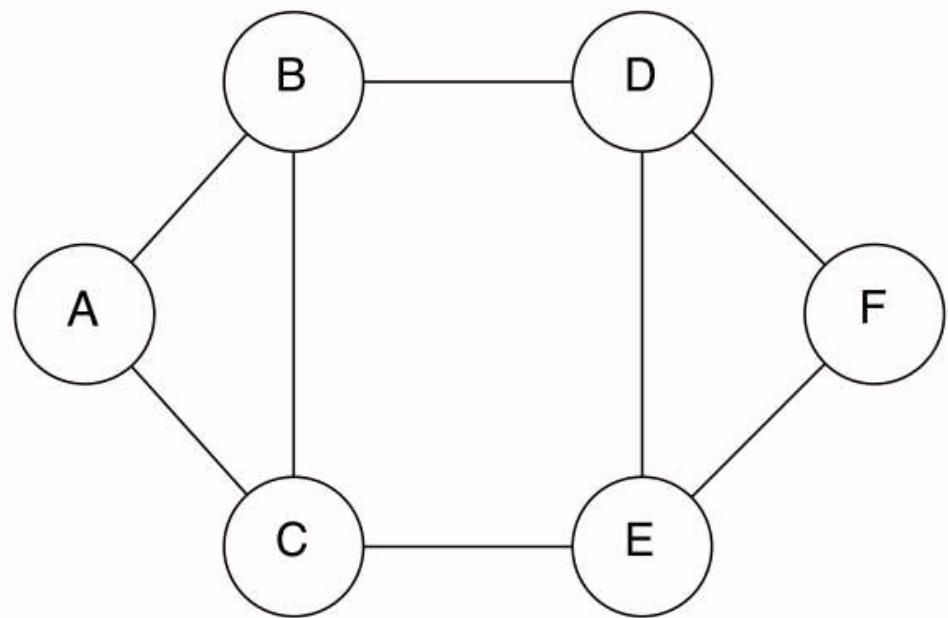
1

Suppose a 400.000 km link is being setup between Earth and Moon. The link has bandwidth 100 MBps point to point, and data travel over the link at speed of light,  $3 \times 10^8$  m/s

- a) Minimum RTT?
- b) How long to download 25 MB image

2

- a) Using RIP, fill forwarding table for node A
- b) If node E down, fill forwarding table for node B

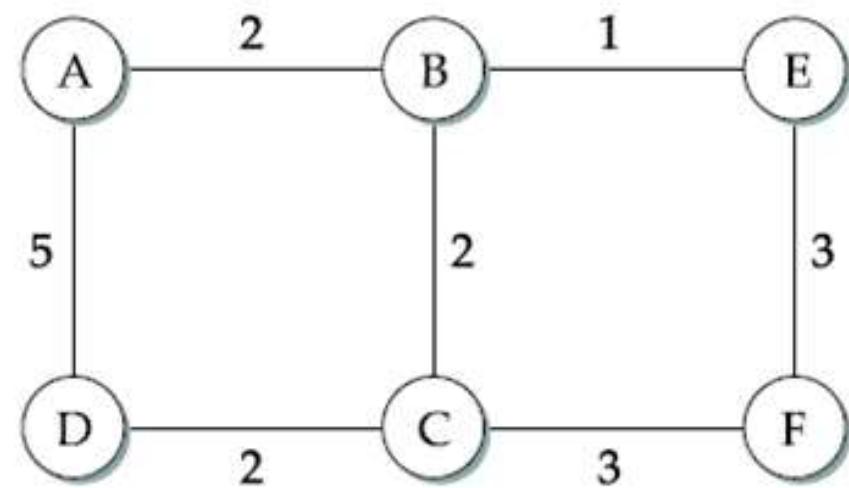


3

- A company has following Ip addreses:
  - 192.1.0.\*
  - 192.1.1.\*
  - 192.1.2.\*
  - 192.1.3.\*
  - 192.1.4.\*
- Under CIDR, how we can describe those addresses

4

- What DV Table in node A?
- What DV Table in node B if E down



5

Suppose we have to 1011 0010 0100 1011

- a) Assume we use CRC 8  $x^8 + x^2 + x + 1$ , what message we transmit?
- b) If first bit change to 0, what is the result of receiver's CRC calculation?