

# Solutions to Selected Problems in Chapter 18 part 2.

P. 18.13

- a) 11111111111000100000000000000000 Not a mask  
b) 11111111110000000000000000000000 mask  
c) 11111111111111111111111100000110 Not a mask

P. 18.17

- a) 10101010 00101000 00001011  
b) 01101110 00101000 111100  
c) 01000110 00001110 00

P. 18.23

- block a: 16.27.24.0 - 16.27.24.63  
block b: 16.27.24.64 - 16.27.24.127  
block c: 16.27.24.128 - 16.27.24.255

combined 16.27.24.0/24

Range 16.27.24.0 - 16.27.24.255

P. 18.25

Router R2 applies mask/26 to the address  
→ 140.24.7.0/26 does not match first entry  
in forwarding table

Router R2 applies mask/24 to the address  
→ 140.24.7.0/24 matches second entry  
in forwarding table → send the packet out  
from interface no to R1

R1 applies mask 126 to the address  $\rightarrow$  140.24.7.0/26  
which matches the first entry in the forwarding  
table. Packet will be sent out from interface mo  
to organization 1.