

1. (6 points) Below is a familiar picture of a NAT/PAT router.

- (a) (2 points) If a datagram is coming from the outside to the private network, the TCP header has the destination port 8002, and the IP header has the destination address 63.63.63.1, what will be the private address of the computer that receives the packet?

*10.10.10.3*

- (b) (3 points) If the receiving computer sends a response, what will it list as the source IP and port?

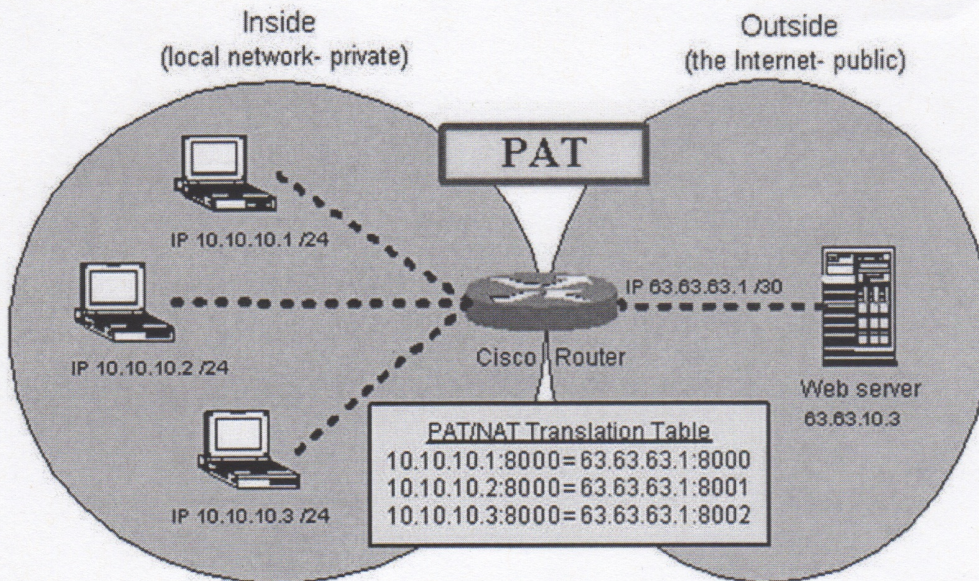
*10.10.10.3*

*port is 8000*

- (c) (3 points) When the outside Web server receives the response, what will it see as the source IP and port?

*63.63.63.1*

*port is 8002*



- (d) (2 points) In the drawing below, show where an external gateway protocol might be used and where an Interior gateway protocol (such as RIP or OSPF) might be used.

