VLAN Lab (75 pts)

You are the network administrator for a sales company located on 2 floors of a building. The topology above illustrates the layout of devices in the building. There is a Management and a Sales department on each floor, with each department being its own subnet. Your goal is to use VLANs to configure the devices so that the Sales and Management departments can communicate with each other. (Note: the switches in the topology above are 3640 routers with an attached NM-16ESW module in order to simulate a 16 port Layer 2 switch.)
Develop an addressing plan for the topology above; configure the devices with this plan and configure VLANs on the devices to simulate the subnets.

A. Include the addressing plan (see table below) in your lab report. (10 pts)
B. Show evidence of proper VLAN configuration with VLAN and information on the switches. (15 pts)
C. Provide evidence of connectivity between all PCs with ping, packet captures, and traceroute output. Explain the routes of traffic between the different hosts and why they follow these routes. (15 pts)
D. How the router and switches were configured. Give proof of these configurations and explain why they are set up this way. (25 pts)