

Warsaw = W      Venice = V  
 Budapest = B      Rome = R  
 Odesa = O      Munich = M

a.	Path expended	Fringe (order by heuristic alone)
	W	W
	WM	WM(3) WB(2) WO(2)
	WMR	WMR(3) WMV(6) WB(2) WO(2)
	W → M → R	

b.	Path expended	close list	Fringe (order by heuristic alone + cost)
	WM	W	WM(18) WB(21) WO(26)
	WMV	M	WB(21) WMV(24) WO(26) WMR(33)
	WB/M	B	WMV(24) WO(26) WMR(33) WBM(36)
	WMVR	V	WO(26) WMVR(30) WMR(33) WB/M(36)
	WOV	O	WMVR(30) WMR(33) WB/M(36) WOV(43)
	WMVR	R	
	W → M → V → R		

c.

This graph is heuristic admissible, because the ~~shortest~~ shortest path cost is 30, and all node heuristic is less than and equal to 30.

However is not consistent, because some  $h(W) - h(M)$  is 27, however the cost of ~~all~~ Warsaw to Munich is just 15. So it is not consistent.

