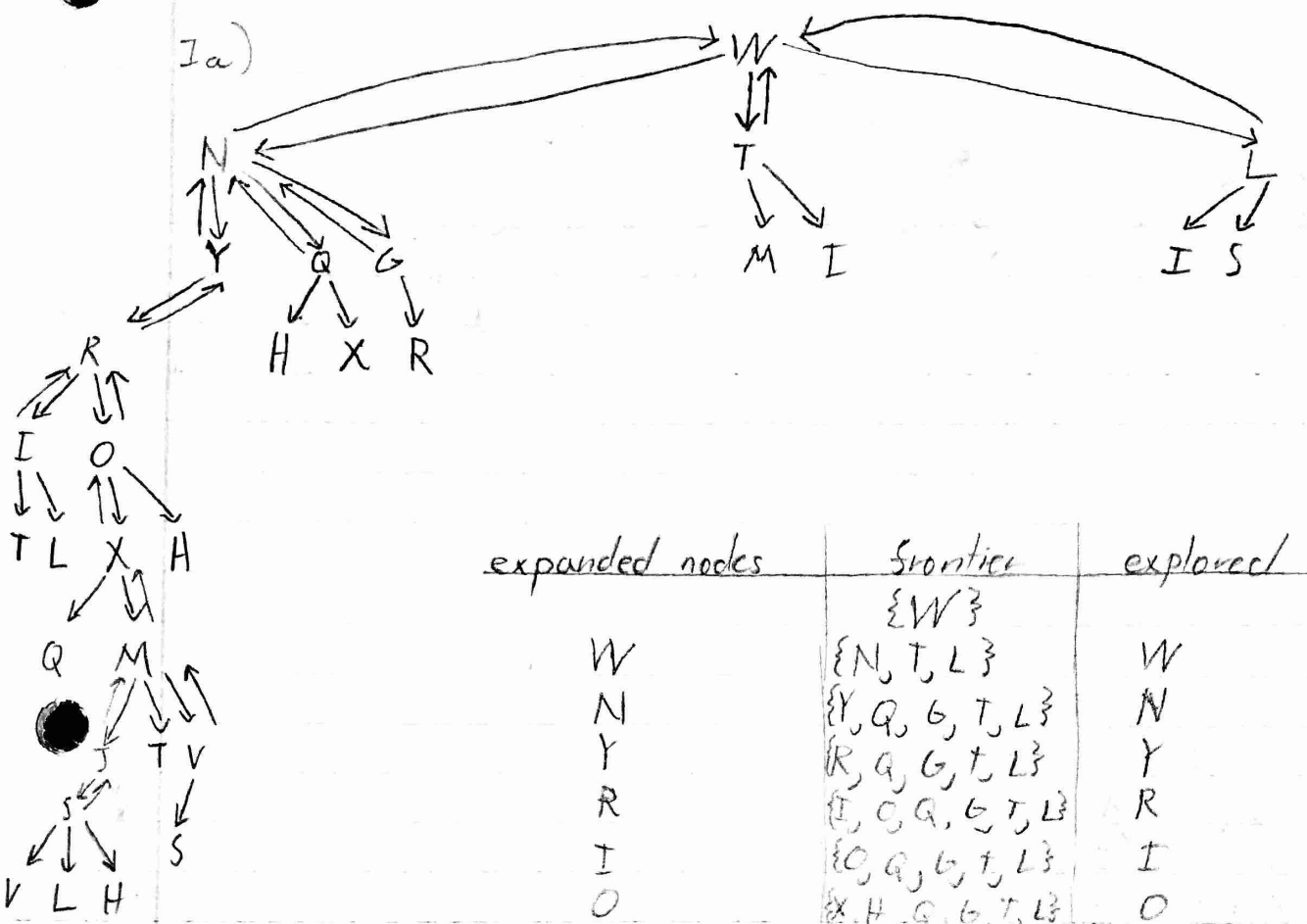
Ia)



expanded nodes	frontier	explored
	{W}	
W	{N, T, L}	W
N	{Y, Q, G, T, L}	N
Y	{R, Q, G, T, L}	Y
R	{I, O, Q, G, T, L}	R
I	{O, Q, G, T, L}	I
O	{X, H, Q, G, T, L}	O
X	{M, H, Q, G, T, L}	X
M	{J, V, H, Q, G, T, L}	M
J	{S, V, H, Q, G, T, L}	J
S	{V, H, Q, G, T, L}	S
V	{H, Q, G, T, L}	V
H (goal)	{Q, G, T, L}	H

expanded nodes: W N Y R I O X M J S V H

solution path: W N Y R O H

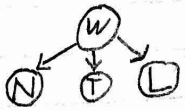
1b) depth: 0

expanded nodes	Frontier	explored
	{W}	

Tree

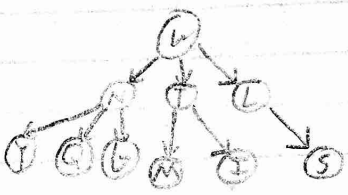
depth: 1

exp. nodes	Frontier	explored
	{W}	
W	{N, T, L}	W
N	{T, L}	N
T	{L}	T
L	{ }	L



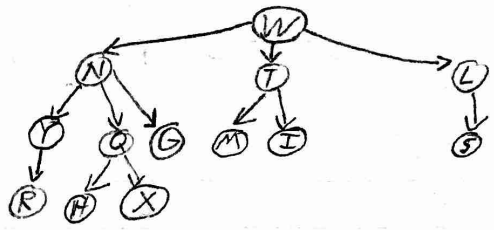
depth: 2

exp. nodes	Frontier	explored
	{W}	
W	{N, T, L}	W
N	{Y, Q, G, T, L}	N
Y	{Q, G, T, L}	Y
Q	{G, T, L}	Q
G	{T, L}	G
T	{M, I, L}	T
M	{I, L}	M
I	{L}	I
L	{S}	L
S	{ }	S



depth: 3

exp. nodes	frontier	explored
	{W}	
W	{N, T, L}	W
N	{Y, Q, G, T, L}	N
Y	{R, Q, G, T, L}	Y
R	{Q, G, T, L}	R
Q	{H, X, G, T, L}	Q
H (goal)	{X, G, T, L}	H



expanded nodes: W, N, Y, R, Q, H
solution path: W, N, Q, H

1c) No, because the manhattan distance can be 3, but that can only take 1 more.