A, h=4   C, h=4   E, h=1
S, h=6   G, h=0
B, h=4   D, h=3.5   F, h=1

A*

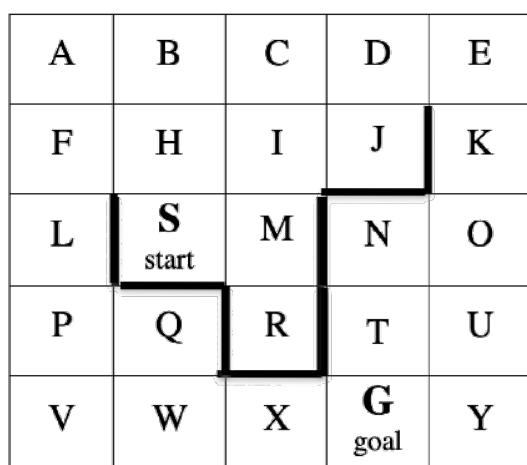| Expanded nodes	Open nodes (fringe)
	S (0+6)
S	A (2+4), B (3+4)
A	B(3+4), C(5+4)
B	CfromA(5+4), CfromB(4+4), D(6+3.5)
CfromB	CfromA(5+4), DfromB(6+3.5), E(7+1), DfromC(5+3.5)
E	CfromA(5+4), D(6+3.5), DfromC(5+3.5), G(9+0)
DfromC	CfromA(5+4), D(6+3.5), G(9+0), F(7+1)
F	CfromA(5+4), D(6+3.5), GfromE(9+0), GfromF(8+0)
G G-F-D-C-A-S	

A	B	C	D	E
F	H	I	J	K
L	S start	M	N	O
P	Q	R	T	U
V	W	X	G goal	Y

Best-first

Expanded	fringe
	S
S	H 5, M 3
M	H 5, I 4, R 2
R	H 5, I 4
I	H 5, C 5, J 3

J	H 5, C 5, D 4
D	H 5, C 5, E 5
C	H 5, E 5, B 6
E	K 4, H 5, B 6
K	O 3, H 5, B 6
O	N 2, U 2, H 5, B 6
N	T 1, U 2, H 5, B 6
T	G 0, U 2, H 5, B 6
G	G-T-N-O-K-E-D-J-I-M-S

A	B	C	D	E
F	H	I	J	K
L	**S** start	M	N	O
P	Q	R	T	U
V	W	X	**G** goal	Y
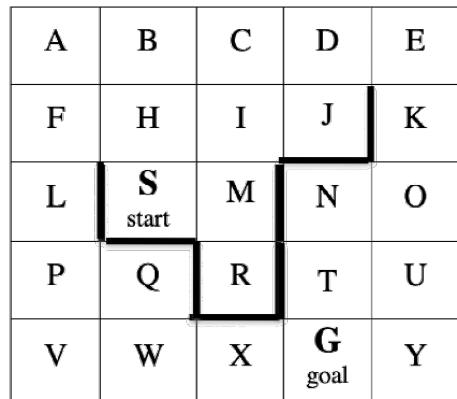
A* - Manhattan Heuristic

Expanded	fringe
	S(0+4)
S	H(1+5), M(1+3)
M	H(1+5), R(2+2), I(2+4)
R	H(1+5), I(2+4)
H	I(2+4), B(2+6), F(2+6)
I	B(2+6), F(2+6), C(3+5), J(3+3)
J	B(2+6), F(2+6), C(3+5), D(4+4)
B	F(2+6), C(3+5), D(4+4), A(3+7)
C	F(2+6), D(4+4), A(3+7)
D	F(2+6), A(3+7), E(5+5)
F	A(3+7), E(5+5), L(3+6)
L	A(3+7), E(5+5), P(4+4)
P	A(3+7), E(5+5), Q(5+3), V(5+3)
Q	A(3+7), E(5+5), V(5+3), W(6+2)
V	A(3+7), E(5+5), W(6+2)
W	A(3+7), E(5+5), X(7+1)
X	A(3+7), E(5+5), G(8+0)
G	G-X-W-Q-P-L-F-H-S