

Key Sample-4 (Page 1 of 2)

DEPTH-FIRST SEARCH: S -> G

Node Expanded	Unvisited Successors
S	B(1), E(1)
B	C(2), I(2), J(2), K(2), E(1)
C	F(3), G(3), I(2), J(2), K(2), E(1)
F	H(4), G(3), I(2), J(2), K(2), E(1)
H	G(3), I(2), J(2), K(2), E(1)
G	I(2), J(2), K(2), E(1)
	Solution path: S -> B -> C -> G

A* SEARCH: S -> G

Node Expanded	Search Fringe (g+h=f)
S	E(2+6=8), B(7+3=10)
E	B(7+3=10), F(5+5=10), G(10+0=10), H(9+4=13)
B	F(5+5=10), G(10+0=10), I(8+2=10), J(9+3=12), H(9+4=13) C(11+7=18), K(15+4=19)
F	G(10+0=10), I(8+2=10), J(9+3=12), H(9+4=13), C(8+7=15) K(15+4=19)
G	I(8+2=10), J(9+3=12), H(9+4=13), C(8+7=15), K(15+4=19)
	Solution path: S -> E -> G

Key Sample-4 (Page 2 of 2)

BREADTH-FIRST SEARCH: S -> G

Node Expanded	Search Fringe
S	B(1), E(1)
B	E(1), C(2), I(2), J(2), K(2)
E	C(2), F(2), G(2), H(2), I(2), J(2), K(2)
C	F(2), G(2), H(2), I(2), J(2), K(2)
F	G(2), H(2), I(2), J(2), K(2)
G	H(2), I(2), J(2), K(2)
	Solution path: S -> E -> G

ITERATIVE DEEPENING SEARCH: S -> G (Depth Limit: 2)

Node Expanded	Search Fringe	Depth
S	[]	0
S	B(1), E(1)	0
B	E(1)	1
E	[]	1
S	B(1), E(1)	0
B	C(2), I(2), J(2), K(2), E(1)	1
C	I(2), J(2), K(2), E(1)	2
I	J(2), K(2), E(1)	2
J	K(2), E(1)	2
K	E(1)	2
E	F(2), G(2), H(2)	1
F	G(2), H(2)	2
G	H(2)	2
	Solution path: S -> E -> G	