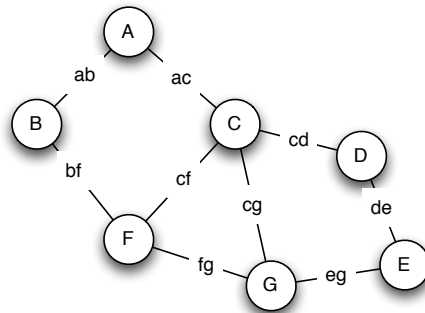MASSACHVSETTS INSTITVTE OF TECHNOLOGY
Department of Electrical Engineering and Computer Science
6.01—Introduction to EECS I
Spring Semester, 2008

**Week 10 NanoQuiz—Sections 1 and 2**

**Name:**



Consider the very simple world shown in the figure; the action names have been suppressed. The initial state is A and the goal is E. The successors of a state are put onto the agenda in alphabetical order. Always use pruning rule 1. Hint: you may find it useful to draw the complete search tree.

1. What sequence of paths would be placed on the agenda by **breadth-first search** *without* **dynamic programming**? The number of spaces below is more than enough.

| Path added to agenda | Path added to agenda |
|---|---|
| 1. | 8. |
| 2. | 9. |
| 3. | 10. |
| 4. | 11. |
| 5. | 12. |
| 6. | 13. |
| 7. | 14. |
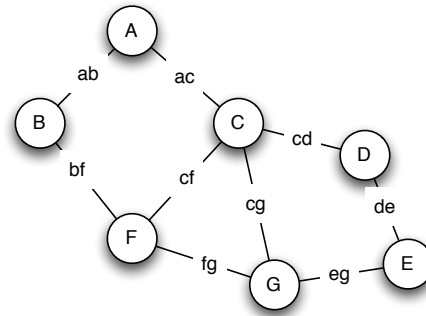
2. What sequence of paths would be placed on the agenda by **breadth-first search** *with* **dynamic programming**? The number of spaces below is more than enough.

| Path added to agenda | Path added to agenda |
|---|---|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

3. What sequence of paths would be placed on the agenda by **depth-first search** *without* **dynamic programming**? The number of spaces below is more than enough.

| Path added to agenda | Path added to agenda |
|---|---|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |