Problem 4:

|  |  |
| --- | --- |
| Num nodes n | Does there exist a red-black tree with n nodes, all of which are black? |
| 1 | Yes |
| 2 | No |
| 3 | Yes |
| 4 | No |
| 5 | Yes |
| 6 | Yes |
| 7 | Yes |

Problem 5:

|  |  |
| --- | --- |
| Num nodes n | Does there exist a red-black tree with n nodes, where exactly one of the nodes is red? |
| 1 | No |
| 2 | Yes |
| 3 | No |
| 4 | Yes |
| 5 | Yes |
| 6 | Yes |
| 7 | Yes |