## Equation Solver Worksheet

1. In the space provided, write down the steps to your algorithm:
2. In the Equation Solver applet, set the difficulty to level 1 and complete five problems using your algorithm. As you do so, record the number of steps you used and the minimum number of steps required.

| Problem | Steps Taken | Minimum Number of Steps |
| :---: | :---: | :---: |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

3. Repeat the process in (2) with difficulty level 2.

| Problem | Steps Taken | Minimum Number of Steps |
| :---: | :---: | :---: |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

4. Repeat the process in (2) with difficulty level 3.

| Problem | Steps Taken | Minimum Number of Steps |
| :---: | :---: | :---: |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

5. Based on the above results, how effective was your algorithm at solving equations? Did you take more steps than the minimum?
6. Did your algorithm perform particularly well or poorly on any one difficulty level? How do you know?
7. Can you think of any improvements to your algorithm that might reduce the number of steps required to solve equations?
