**Simplify the Radical:**

1. $\sqrt{162}$ 2. $2\sqrt{90}$

**Factor completely**

3. $2x^{3}-8x^{2}-42x$

4. $81x^{2}-64$

5. **Solve by Graphing. Complete the table, graph, and find the solutions. Show all work.**

|  |  |  |
| --- | --- | --- |
| *x* | $$y=x^{2}-2x-3$$ | *Y* |
| -4 |  |  |
| -3 |  |  |
| -2 |  |  |
| -1 |  |  |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

 Solutions: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_