

**Radical Equations
In-Class Assignment**

- In order to earn full marks for each question, you have to clearly communicate your final answer and show verification and check whenever needed.
- Use your notes and work with your peers.

Task: Showing all work, solve given equations algebraically. Justify your answer (solve, verify, check). And clearly state whether your solution is **valid** or **extraneous**.

L1:

1. $5 = \sqrt{x} + 1$

2. $-10 = -7 + \sqrt{x + 5}$

L2:

3. $-2\sqrt{5x} = -18$

4. $\sqrt{x+1} = \sqrt{2x-7}$

L3:

5. $\frac{2}{3}\sqrt{x} = 14$

6. $\sqrt{-x+3} + 13 = -2$

L4:

7. $3\sqrt{-x} + 1 = 3x + 7$

8. $\sqrt{x+1} = 5 - \sqrt{x}$