Algebra 2 – Unit 2 Lesson 3 Worksheet

Name: _____ **Hour:** _____

Solve the following equations. There are 5 main types of problems: Basic Operations, Powers, Radicals, Exponentials, and Logarithms. This worksheet has three problems from each type (in order). You can expect that the QA over this lesson has one question over each type, and only covers around 3 types.

1. $-1 = \frac{-3+x}{2} + 5$

2. $\frac{3}{2}(2x + 8) = -9$

3. $3\left(\frac{x}{5} - 2\right) = 15$

4. $10 = 5x^3 - 6$

5. $7 + \frac{x^2}{3} = 11$

6. $-3 = \frac{(x-5)^5}{4}$

7. $9 = 3\sqrt{x + 1}$

8. $6\sqrt[3]{x} - 1 = 5$

9. $-1 = \frac{\sqrt[4]{-2+x}}{3}$

10. $\frac{3}{2}e^x + 1 = 10$

11. $5(3)^{x-4} = 25$

12. $12 = \frac{5^x}{2} + 9$

13. $-2 = \log_3(x + 7) - 5$

14. $\frac{\log x}{4} + 9 = 8$

15. $-6 = -\frac{2}{5}\ln(x - 1)$