H Algebra II   Name_____
WS: Graphing & Characteristics of Square & Cube Roots

For each problem, describe its transformation compared to its parent graph. Then, graph
and give the characteristics: vertex, domain, range, extremas, intervals of change, end
behaviors and intercepts.

1. $y = 5\sqrt{x} + 3$

2. $y = 3\sqrt[3]{x} + 6$

3. $y = -\dfrac{1}{2}\sqrt{x+6} + 4$

4. $y = -4\sqrt{-(x+2)}$

5. $y = 3\sqrt{x-4} - 8$

6. $y = -\sqrt[3]{x+2} - 4$

7. $y = \dfrac{1}{4}\sqrt{x-9} - 4$

8. $y = \sqrt[3]{-2(x-1)} + 8$

9. $y = \sqrt{\dfrac{1}{2}(x-3)} + 1$

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

11. $y = -\dfrac{1}{4}\sqrt[3]{x+5} - 1$

12. $y = -\sqrt{-2x+2} - 3$