RADICAL Project

Choose one problem from each column to complete as a group. Create a poster solving your group's problems. Clearly show the problem you are working on and all work required to answer the question. Each problem has a different point value. Your grade will be the total points earned out of 15, without the ability to go beyond 15 points.

Solving Radicals

1) $\sqrt{2a-7} = \sqrt{8-a}$ **(6 points)**
2) $\sqrt{3v+27} = \sqrt{3-v}$ **(6 points)**
3) $1 - \sqrt{3v+4} + \sqrt{2v+1}$ **(8 points)**
4) $\sqrt{7b-3} = \sqrt{8-b} + 3$ **(8 points)**
5) $\sqrt{2h-5} + \sqrt{h-3} = 1$ **(8 points)**
6) $\sqrt{5k+5} - \sqrt{3k+4} = 1$ **(10 points)**
7) $\sqrt{3n+1} - \sqrt{2-2n} = 2$ **(10 points)**

Graphing

1) Graph the function and its inverse. Explain every step along the way. $g(x) = \frac{2}{-x-3}$. State the domain and range of the function and its inverse. **(10 points).**
2) Graph the function and its inverse. Explain every step along the way. $g(x) = -(2x-3)^3$. State the domain and range of the function and its inverse. **(10 points)**
3) Graph the function $y = -(x+2)^2 - 3$. **(5 points).**
4) Graph the function $y = 2\sqrt{x+1} + 3$. **(5 points)**
5) Graph the function $y = -3\sqrt{x-4} + 2$ **(7 points)**
6) Graph the function $y = 2\sqrt[3]{3-x}$+1 **(8 points)**
7) Graph the function $y = -4\sqrt[3]{x-6} + 2$ **(8 points)**