Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Partner’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Operations with Radicals Row Game**

Directions: Depending on whether you are in a Row A or Row B, complete Problem Set A or B. When you are finished, add you answer to your partner’s, and then compare to the Sum column. If your sum is not the same as the one in the Sum column, check each other’s work to find out where the mistake is.

Problem Set A Problem Set B Sum

$7\sqrt[3]{x^{2}}-2\sqrt[3]{x^{2}}$ $6\sqrt[3]{x^{2}}-2\sqrt[3]{x^{2}}$ 9$\sqrt[3]{x^{2}}$

$$\frac{8}{\sqrt{6}-\sqrt{5}} \frac{3}{\sqrt{7}-\sqrt{6}} 3\sqrt{7}+11\sqrt{6}+8\sqrt{5}$$

$ (2\sqrt{6}+8)(2\sqrt{6}-8)$ $(\sqrt{3}+\sqrt{5})(\sqrt{3}-\sqrt{5}$) -42

$$\frac{5+\sqrt{3}}{2-\sqrt{3}} \frac{4}{1+\sqrt{3}} 11+9\sqrt{3}$$

$(3+\sqrt{5})(1+\sqrt{5})$ $14\sqrt{20}-3\sqrt{125}$ 8+17$\sqrt{5}$

$$\frac{4-2\sqrt[3]{6}}{\sqrt[3]{4}} \frac{4\sqrt[3]{4}+6\sqrt[3]{3}}{\sqrt[3]{2}} 6\sqrt[3]{2}+2\sqrt[3]{12} $$

$(2\sqrt{5}+3\sqrt{3})^{2}$ $\left(\sqrt{3}+\sqrt{5}\right)^{2}$ 55 + 14$\sqrt{15}$