Name: _____

Algebra 1

Adding & Subtracting Radicals Tic-Tac-Toe

Date: _____ Block: _____

Choose any box to start with. Work 5 problems in a ROW or COLUMN and circle your final answer. Then, have a teacher check it. If you get the problem correct, you will get an "O" and if you get the problem incorrect, I get an "X." If you get an "X," you must attempt additional problems until you get 5 in a ROW or COLUMN. If you run out of options to get tic-tac-toe then you have to work ALL the problems. Be sure to double check your answer BEFORE you bring it up to be checked!

Directions: Simplify each radical expression or product of radicals.

1. $3\sqrt{5}-2\sqrt{5}$	**2.** $5\sqrt{3}(-4\sqrt{2}-4\sqrt{6})$	**3.** $\sqrt{6}(\sqrt{3}+\sqrt{2})$	**4.** $-4\sqrt{63}+3\sqrt{7}$	**5.** $\sqrt{18}+\sqrt{8}$
6. $\sqrt{45}+\sqrt{20}$	**7.** $-8\sqrt{3}+4\sqrt{3}$	**8.** $2\sqrt{6}(-3\sqrt{2}+5\sqrt{10})$	**9.** $\sqrt{5}(\sqrt{2}+\sqrt{10})$	**10.** $4\sqrt{48}-2\sqrt{3}$
11. $2\sqrt{27}+3\sqrt{12}$	**12.** $\sqrt{27}-\sqrt{48}$	**13.** $2\sqrt{2}+5\sqrt{2}$	**14.** $-3\sqrt{3}(-\sqrt{6}+5)$	**15.** $\sqrt{3}(\sqrt{6}+3)$
16. $\sqrt{5}(\sqrt{5}+3)$	**17.** $3\sqrt{45}-2\sqrt{5}$	**18.** $\sqrt{54}+\sqrt{24}$	**19.** $-2\sqrt{7}-\sqrt{7}$	**20.** $5\sqrt{6}(2-2\sqrt{3})$
21. $-\sqrt{3}(-4\sqrt{2}+3\sqrt{6})$	**22.** $\sqrt{5}(\sqrt{6}+5)$	**23.** $3\sqrt{24}+3\sqrt{6}$	**24.** $\sqrt{27}-\sqrt{12}$	**25.** $-6\sqrt{10}-2\sqrt{10}$