Review T1 Circuit Name: _____
Solving EQs: Linear, Quadratic, Radical, Absolute Value
Solving Linear Inequalities

Start with numbers 1 and work the problem. Find your solution among the choices. That problem becomes #2, so put #2 in the problem blank. Work that question and proceed in this manner until finished. ☺

Answer: _____ #1 $\frac{-7}{2}\left(\frac{5}{2}x-2\right)=\frac{217}{6}$	*Answer:* $x=\sqrt{5},-\sqrt{5}$ # _____ $9x^2-3=1$
Answer: $x=\pm 9$ #____ $10+6\lvert x+7\rvert=22$	*Answer:* $x=4$ #_____ Solve the inequality and graph the solution $\frac{8}{5}\geq\frac{7}{2}x+\frac{33}{5}-x$
Answer: $x<\frac{3}{2}$ #_____ Solve the inequality and graph the solution $7x+19\leq 3(x-3)$	*Answer:* $x=-\frac{10}{3}$ #_____ $-36=-\frac{10}{3}\left(-\frac{7}{2}x+3\right)+\frac{4}{3}x$

Answer: $x = -2$ #_____ $-3 - 4(-7x - 3) = 6x + 9$	*Answer:* $x = \frac{-15}{2}, \frac{15}{2}$ #_____ $\left\|\frac{x}{9}\right\| - 2 = -1$
Answer: $x = \pm\frac{2}{3}$ #_____ $2x^2 - 2 = 16$	*Answer:* $x \leq -2$ #_____ Solve the inequality and graph the solution $\frac{5}{4}x + \frac{13}{6} + 1 < \frac{121}{24}$
Answer: $x = 220$ #____ $\frac{1}{2}\sqrt{25x} = 5$	*Answer:* $x = -5, -9$ #_____ $\sqrt{14 - 2x} + 8 = -4$

Answer: $x = 0$ #____ $13 + 5x = 2(6 + 2x)$	*Answer:* $x \leq -7$ #_____ Solve the inequality and graph the solution $-2(1 + 6x) < 2x - 16$
Answer: $x = \pm 3$ #_____ $2x^2 - 4 = 36$	*Answer:* $x = -1$ #_____ $5x^2 - 4 = 21$
Answer: $x = 5$ #_____ $\frac{1}{3}\sqrt[3]{4 - x} + 5 = 3$	*Answer:* $x = \pm 2\sqrt{5}$ #_____ $\lvert x + 4 \rvert = 8$

Answer: $x = 4, -12$ #_____ $\lvert -4x \rvert + 2 = 32$	*Answer:* $x = -65$ $(extraneous\ solution)$ #_____ $\sqrt[3]{2x - 2} = 2$