Honors Algebra 2 Name: _____
Circuit: T5 Review Date: _____

Show all of your work to receive credit for the circuit.

Answer: _____ #1 Solve by factoring: $x^2 - 6x = 16$ To move forward in the circuit, add your solutions.	Answer: 24 #_____ Solve the inequality. $-1 + \sqrt{x-3} \leq 1$ Write the correct answer here: _____ To move forward in the circuit, subtract the lower bound from the upper bound.
Answer: $\frac{5}{2}$ #_____ Solve the inequality. $-48 < -\sqrt{4x-12}$ Write the correct answer here: _____ To move forward in the circuit, subtract the lower bound from the upper bound and find the square root of that.	Answer: $\frac{4}{15}$ #_____ Solve by factoring. $2x^2 + x - 15 = 0$ To move forward in the circuit, add your solutions.
Answer: 6 #_____ Solve by factoring. $x^2 = -4x$ To move forward in the circuit, look for the larger solution.	Answer: -8 #_____ Solve the inequality. $2x^2 - 5x - 3 \leq 0$ Write the answer here: _____ To move forward in the circuit, add the zeros.
Answer: 0 #_____ Solve by factoring. $15x^2 + 23x + 4 = 0$ To move forward in the circuit, multiply your solutions.	Answer: 7 #_____ Solve the inequality. $x^2 + 8x + 15 \geq 0$ Write the answer here: _____ To move forward in the circuit, add the zeros.

Answer: -7 #_____ Solve the equation. Check for extraneous solutions. $-8+\sqrt{3x+40}=0$	Answer: $-\frac{1}{2}$ #_____ Solve by factoring. $5x^2+6x=-1$ To move forward in the circuit, add your solutions.
Answer: 1 #_____ Solve the equation. Check for extraneous solutions. $\sqrt{-6-2x}=\sqrt{1-x}$	Answer: 1000 #_____ Solve the equation. Check for extraneous solutions. $x+2=\sqrt{7x+2}$ To move forward in the circuit, find the answer to one of your checks. ☺
Answer: 3 #_____ Solve the equation. Check for extraneous solutions. $-1+\sqrt{3x+4}=\sqrt{3x-5}$	Answer: $-\frac{6}{5}$ #_____ Solve the equation by taking a square root. $5-10x^2=-155$ To move forward in the circuit, divide your solutions.
Answer: -1 #_____ Solve the equation by taking a square root. $4x^2-4=0$ To move forward in the circuit, find the larger solution.	Answer: 8 #_____ Solve the equation. Check for extraneous solutions. $\sqrt[5]{100x}=10$

When solving a radical inequality, when do you have to find a lower bound? _____