Name: _____   Date: _____   Period: _____

Original Equation

Step 1:   **ISOLATE** the absolute value (if possible)

Step 2:   **Split**
                    (Unless the answer is negative, then no solution).

Equation 1   **Equation 2**

Drop the absolute value brackets.   Drop the absolute value brackets and **NEGATE.**
(use parenthesis if necessary).   (use parenthesis if necessary).

Step 3:   Solve Equation   Solve Equation

Step 4:   Check your answer in **ORIGINAL** Equation   Check your answer in **ORIGINAL** Equation

Solve #s 1–20 ON A SEPARATE PIECE OF PAPER using the template provided. Organization is a KEY to success. REMEMBER you **MUST** check **EACH** solution in the **ORIGINAL** equation.

1. $\lvert r \rvert = 5$	2. $\lvert q \rvert = -7$	3. $\lvert b - 2 \rvert = 5$
4. $\lvert k + 6 \rvert = 9$	5. $\lvert -5p \rvert = 35$	6. $\left\lvert \dfrac{a}{3} \right\rvert = 4$
7. $\lvert 8y - 3 \rvert = 13$	8. $\lvert x + 4 \rvert + 7 = 3$	9. $\lvert j \rvert = \lvert 2j + 3 \rvert$
10. $\lvert 3f - 6 \rvert = \lvert 9f \rvert$	11. $\lvert b + 3 \rvert = \lvert 2b - 2 \rvert$	12. $\lvert 4h - 2 \rvert = 2\lvert h + 3 \rvert$
13. $3\lvert w - 5 \rvert = \lvert 2w + 10 \rvert$	14. $\lvert 2y + 5 \rvert = 3y$	15. $\lvert 2x - 8 \rvert + 24 = 6$
16. $\lvert -2x + 6 \rvert = -8$	17. $4\lvert n + 8 \rvert = 56$	18. $2\lvert 4s \rvert + 6 = 14$

19. Your friend says the absolute value equation $\lvert 2x + 9 \rvert + 7 = 3$ has two solutions because the constant on the right side of the equation is positive. Is your friend correct? Explain.

20. You have money in your wallet, but you don't know the exact amount. When a friend asks you, you say that you have 50 dollars give or take 15. Use an absolute value equation to find least and biggest amount of money in your pocket?