Math 134 Spring 2018 Krystin Manguba-Glover Homework Quiz 6

Name: \_\_\_\_\_

Show all your work and simplify your answers unless otherwise specified. If you do not turn in a rewrite within a week (or after the fifth attempt), your score will be solidified.

1. Solve the following absolute value inequality. Express your answer in interval notation, set-builder notation, and graph your solution on a number line.

$$1 < \left| -2x + \frac{6}{7} \right| + \frac{3}{7}$$

2. Regular gas at Aloha Gas Station costs \$3.14 per gallon. Regular gas at Costco costs \$2.89 per gallon, but you must be a member to purchase gas here. With an annual membership price of \$60 per year, how many gallons of regular gas must you purchase at Costco in order for it to be a better deal? Express your answer as an inequality.