

YOUR NAME: \_\_\_\_\_

George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Katie drives to class in 20 mins. Her roommate, Rachel, averages 10 mph more than Katie and drives to the same class in 15 mins.

- (a) Introduce variable(s), explain precisely their meaning and set up an equation reflecting the data.

- (b) What is Katie's average speed?

2. (a) Solve the linear inequality  $17 - 5x \geq -8$ .

- (b) Write the solution set in interval notation.

- (c) Graph the solution set.